SERVICE MANUAL

PARTS LIST

MODEL CS-705D

AKAI

STEREO CASSETTE DECK

MODEL CS-705D

SECTION 1	SERVICE MANUAL	2
SECTION 2	PARTS LIST	23
SECTION 3	SCHEMATIC DIAGRAM	36

SECTION 1

SERVICE MANUAL

TABLE OF CONTENTS

I. TECHNICAL DATA 3
II. DISMANTLING OF UNIT 4
III. PRINCIPAL PARTS LOCATION 5
IV. MECHANISM ADJUSTMENT 6
1. TAKE-UP TORQUE AT VARIOUS MODES AND TORQUE MEASURING METHOD 7
2. TAPE SPEED ADJUSTMENT 7
3. PINCH ROLLER PRESSURE MEASUREMENT 7
4. ADJUSTMENT OF GAP BETWEEN THE PINCH ROLLER ARM AND STOPPER 7
5. FLYWHEEL THRUST LOOSE PLAY ADJUSTMENT 7
V. HEAD ADJUSTMENT 8
1. RECORDING/PLAYBACK HEAD HEIGHT ADJUSTMENT 9
2. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT 9
3. HEAD ADJUSTMENT PRECAUTIONS 9
VI. AMPLIFIER ADJUSTMENT 10
VII. DC RESISTANCE OF VARIOUS COILS 11
VIII. CLASSIFICATION OF VARIOUS P.C BOARD 11
1. RELATION OF P.C BOARD TITLE AND NUMBER 11
2. COMPOSITION OF VARIOUS P.C BOARDS 12

For basic adjustments, measuring methods, and operating principles, refer to GENERAL OPERATING PRINCIPLES AND ADJUSTMENTS.

I. TECHNICAL DATA

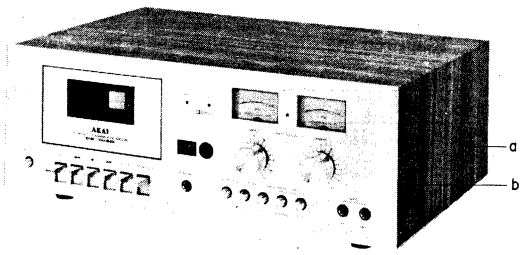
TRACK SYSTEM	4 track 2 channel stereo system
TAPE SPEED	1-7/8 ips
WOW AND FLUTTER	Less than 0.08% WRMS (NAB) Less than 0.24% (DIN 45507)
FREQUENCY RESPONSE	35 to 14,000 Hz ±3 dB using Low Noise tape 35 to 15,000 Hz ±3 dB using Chrome tape 35 to 16,000 Hz ±3 dB using Fe-Cr tape
DISTORTION	Less than 1.5% using Low Noise tape (1,000 Hz "0" VU)
SIGNAL TO NOISE RATIO	Better than 51 dB (measured via tape with peak recording level of +3 VU) Dolby Switch ON: Improves up to 10 dB above 5 kHz
ERASE RATIO	Better than 70 dB
BIAS FREQUENCY	85 kHz
HEADS	(2): One Recording/Playback Head, One Erase Head
MOTOR	(1): Electronically Speed Controlled DC Motor
FAST FORWARD AND REWIND TIME	80 sec using a C-60 cassette tape
OUTPUT JACKS	Line(2): 410 mV ("0" VU)/Required load impedance: more than 20 k ohms Phone (1): 50 mV/8 ohms
INPUT JACKS	Microphone(2): 0.3 mV/Required microphone impedance: 600 ohms Line(2): 70 mV/100 k ohms
DIN JACK	Input 0.3 m V/Output 410 mV
TRANSISTOR	2SA564(R) ... . 1 — 2SC838(R)(S) . . . 12 2SA699(Q)(R) . . . 1 — 2SC828(R) . . . 2 2SB22(BLU) . . . 1 — 2SC1226(Q)(R) . . . 1 2SC644(S)(T) . . . 2 — 2SC1327(S)(T) . . . 4
IC	NE545B . . . 2
DIODE	1S188AM . . . 14 — TD-960016-1 . . . 1 WZ177 . . . 1 — TLR-102 . . . 2 1N4002 . . . 9 — TLG-102 . . . 1
POWER REQUIREMENTS	CSA, UL and LA Models: 120V, 60 Hz only CEE Models: 220V, 50 Hz only Other Models: 110/120/220/240V, 50/60 Hz (Switchable)
DIMENSIONS	440(W) x 165(H) x 300(D) mm, (17.3" x 6.4" x 11.8")
WEIGHT	6.8 kg (15.0 lbs)

NOTES:
1. For improvement purposes, specifications and design are subject to change without notice.
2. Noise reduction circuit made under license from Dolby Laboratories Inc.
   The word 'DOLBY' and the Double-D symbol are trademarks of Dolby Laboratories Inc.

II. DISMANTLING OF UNIT

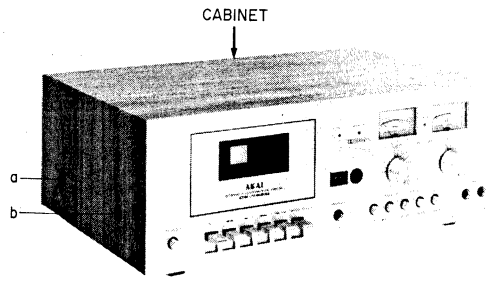
In case of trouble, etc. necessitating disassembly, please disassemble in the order shown in photographs. Reassemble in reverse order.

1



SCREWS

2



SCREWS

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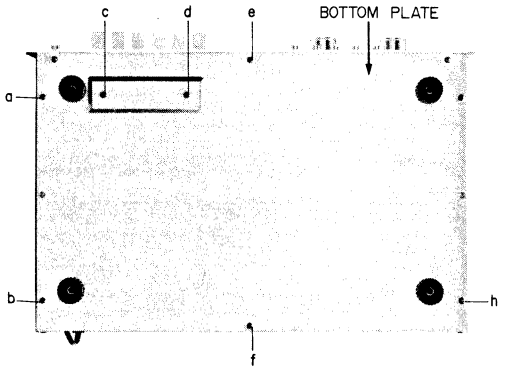

SCREWS

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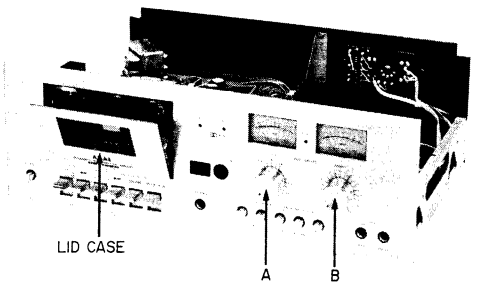
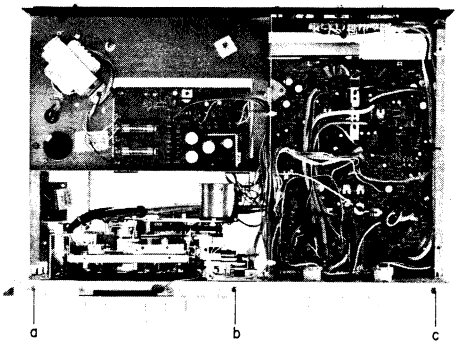


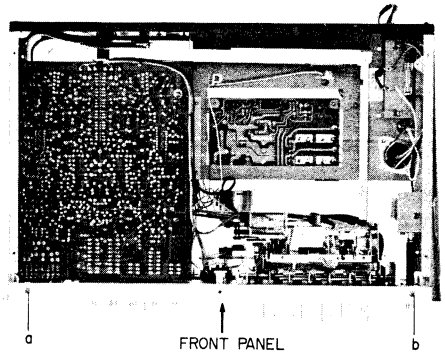
KNOBS

5



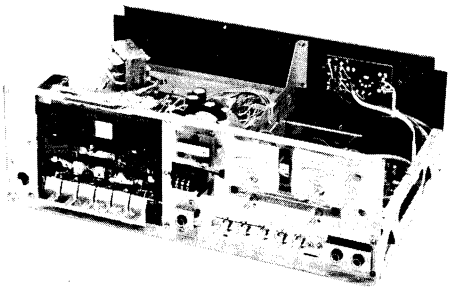
SCREWS

6



SCREWS

7



III. PRINCIPAL PARTS LOCATION

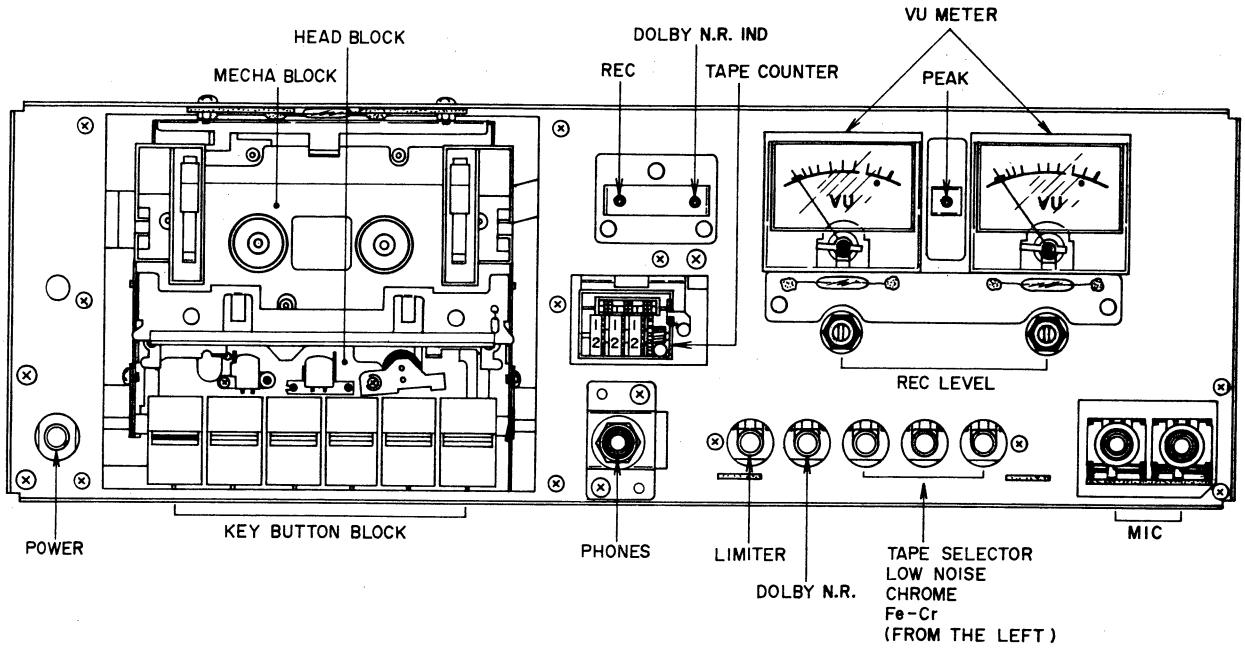


Fig. 1 Front View

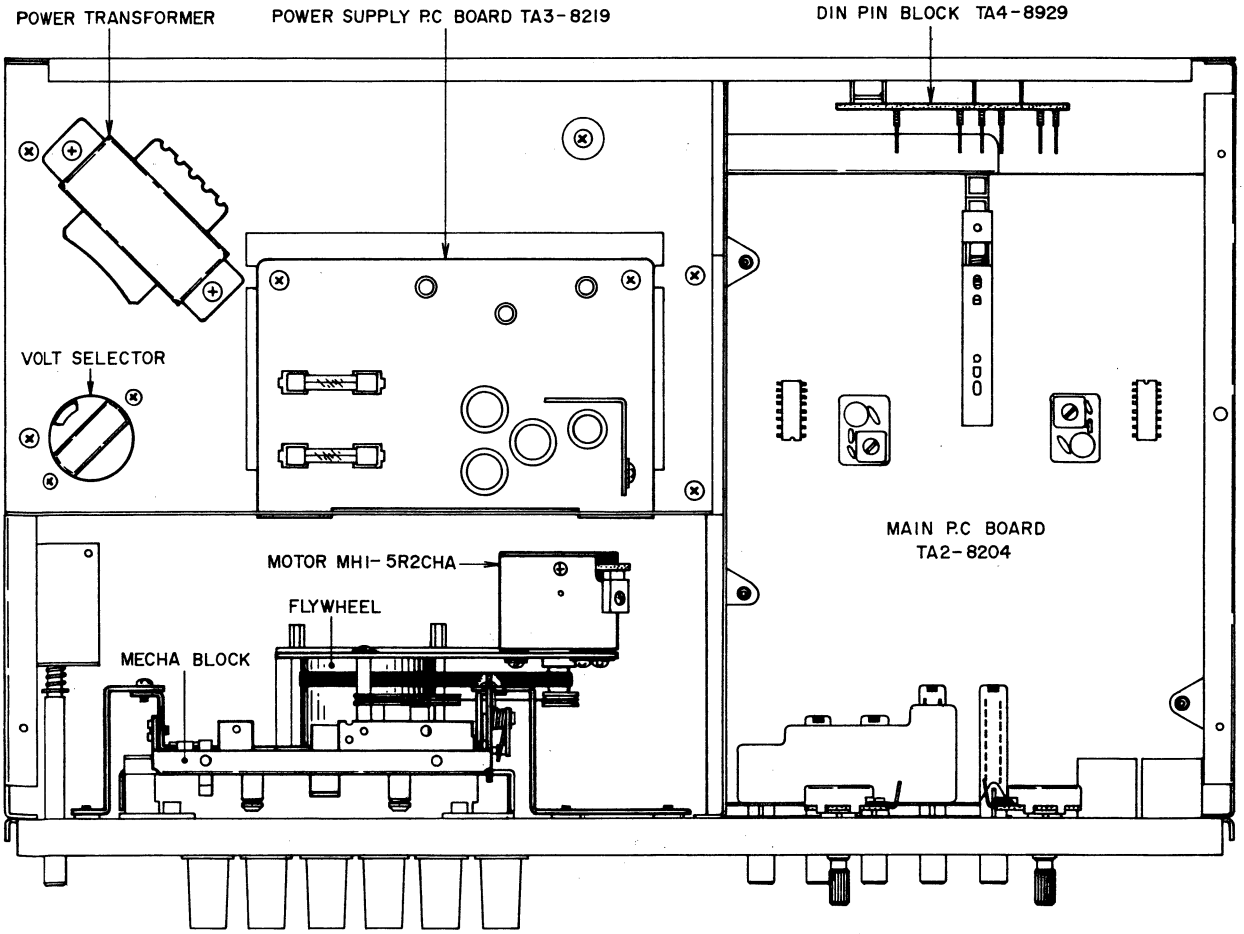


Fig. 2 Top View

IV. MECHANISM ADJUSTMENT

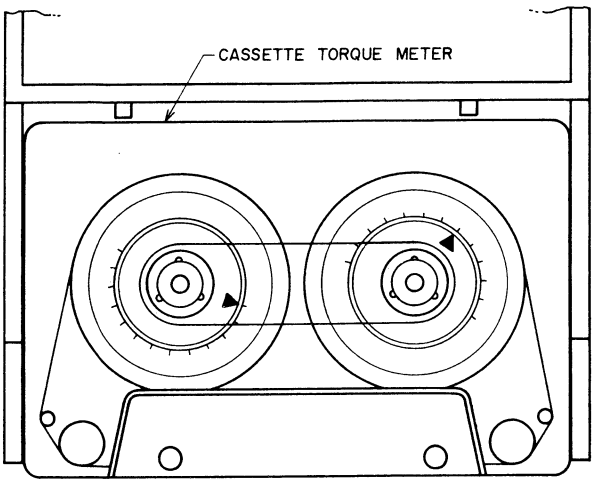


Fig. 3

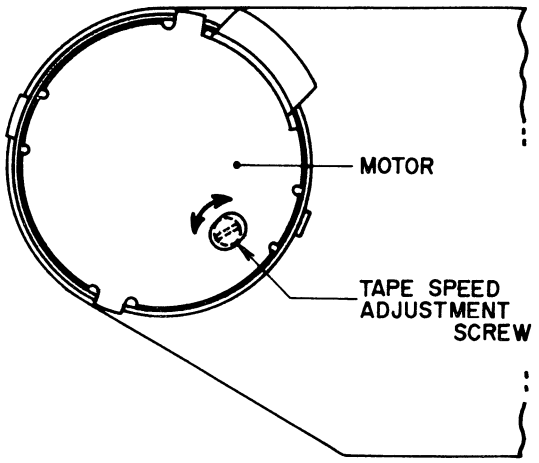


Fig. 4. Tape Speed Adjustment

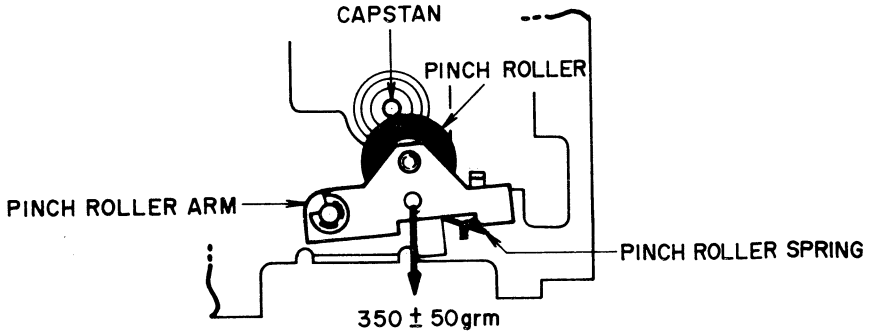


Fig. 5 Pinch Roller Pressure Measurement

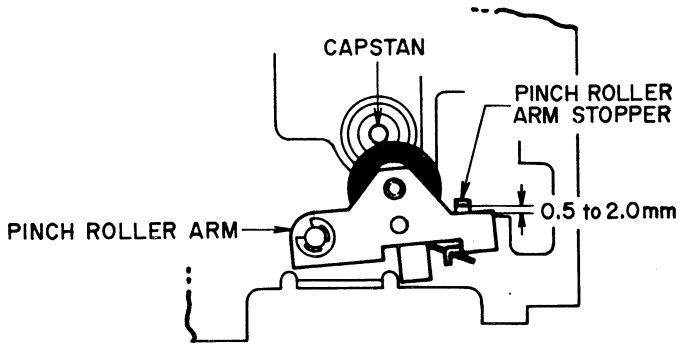


Fig. 6 Gap Between Pinch Roller Arm and Stopper

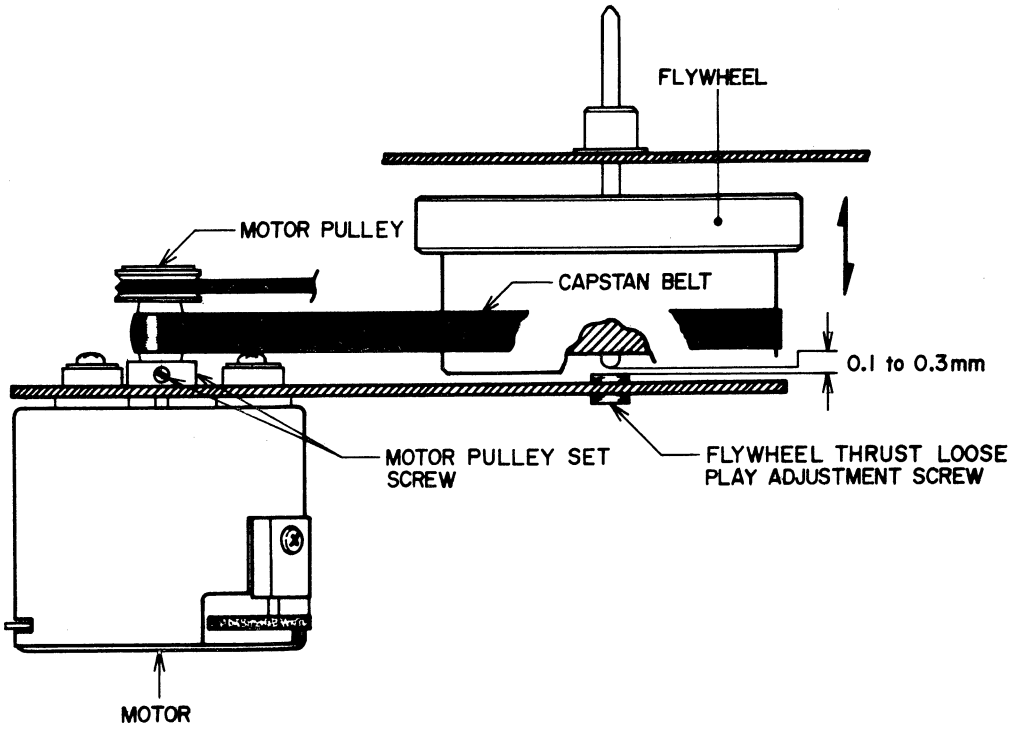


Fig. 7

1. TAKE-UP TORQUE AT VARIOUS MODES AND TORQUE MEASURING METHOD (Refer to Fig. 3)

As shown in Fig. 3, set a cassette torque meter on cassette base, and take a reading of the indication at each respective mode.

Playback mode	40 to 65 grm-cm
Fast Forward mode	70 to 130 grm-cm
Rewind mode	70 to 130 grm-cm

In case specified take-up torque cannot be attained,

Playback mode: replace whole tension arm block comp.

Fast Forward or Rewind mode: replace idler A comp.

2. TAPE SPEED ADJUSTMENT (Refer to Fig. 4)

Playback a 1,000 Hz pre-recorded test tape and adjust tape speed adjustment screw to obtain a tape speed of 1,000 Hz ±1%.

3. PINCH ROLLER PRESSURE MEASUREMENT (Refer to Fig. 5)

At playback mode, pull back the pinch roller with a spring gauge until the pinch roller separates from the capstan by about 1 mm to 2 mm and then gently return. Take a reading of the spring gauge indication at the moment the pinch roller touches the capstan and begins to rotate.

Specified Pinch Roller Pressure: 350 ±50 grm

In case specified pressure cannot be attained, replace the pinch roller spring.

4. ADJUSTMENT OF GAP BETWEEN THE PINCH ROLLER ARM AND STOPPER (Refer to Fig. 6)

Adjust by bending the pinch roller stopper so that a 0.5 to 2.0 mm gap is definitely obtained between the pinch roller arm and the pinch roller arm stopper when the machine is set to play mode.

5. FLYWHEEL THRUST LOOSE PLAY ADJUSTMENT (Refer to Fig. 7)

Adjust by turning flywheel thrust loose play adjustment screw to obtain a 0.1 to 0.3 mm of loose play when the flywheel is moved as indicated by the arrow mark.

Paint lock the adjustment screw.

V. HEAD ADJUSTMENT

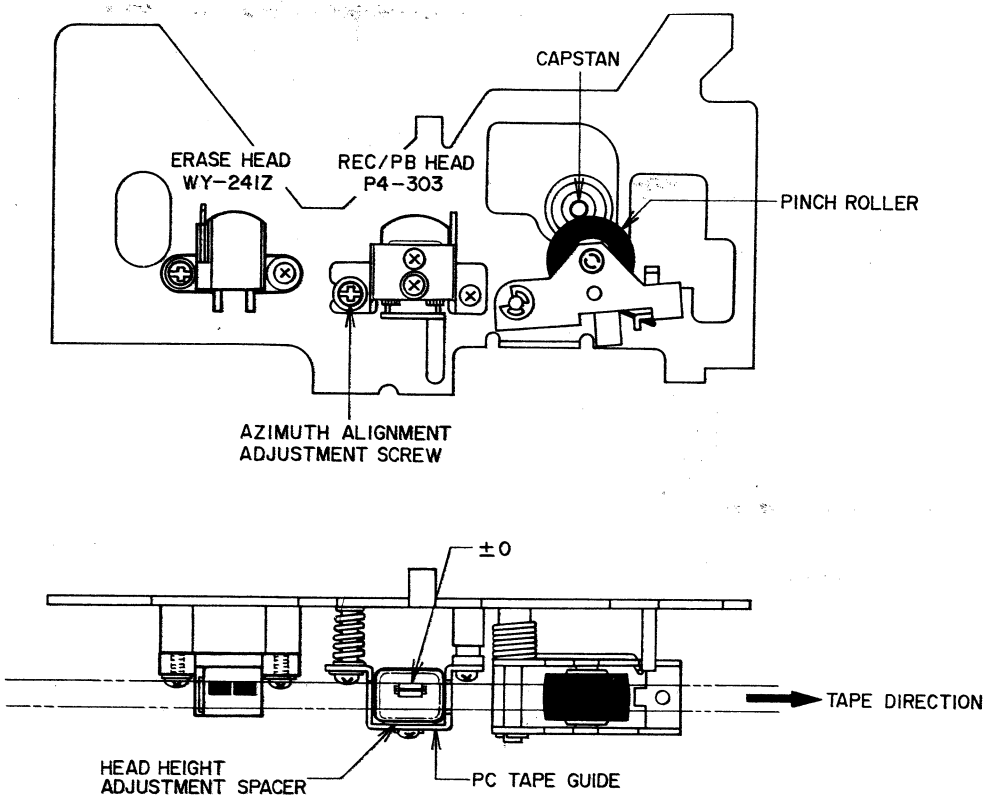


Fig. 8

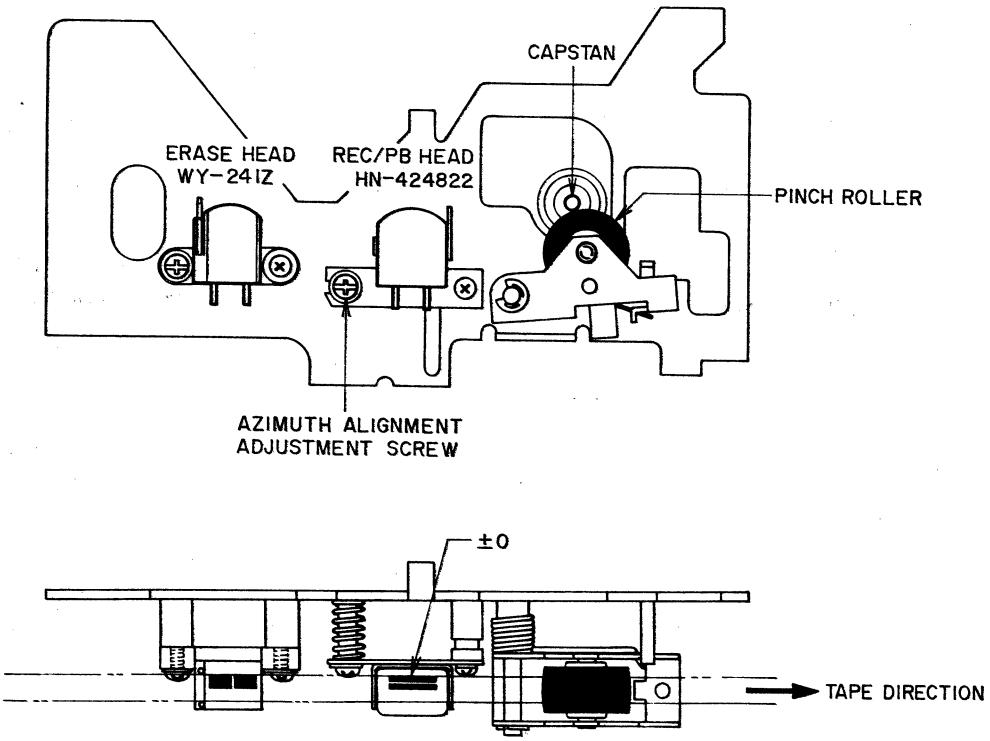


Fig. 9

NOTE: Two different types of REC/PB Heads (P4-303 and HN-424822) are being employed in the CS-705D. Because the installation plate of both heads differ, when replacing this head, replace with the same type head as previously used.

1. RECORDING/PLAYBACK HEAD HEIGHT ADJUSTMENT (Refer to Fig. 8)

Playback a 4 track 1,000 Hz pre-recorded test tape and adjust the number of spacers between the head and P.C tape guide so that equal maximum output level between +1 VU to 3 VU is obtained on both channels.

2. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT (Refer to Figs. 8, 9)

Playback a 10 kHz Azimuth Adjustment Test Tape and adjust Rec/PB Head Azimuth Adjustment Screw to obtain maximum output.

At this time connect an oscilloscope to the line output and confirm that the left and right output waveforms are in-phase.

If not in-phase, because the azimuth adjustment has not be made to optimum point, repeat adjustment.

3. HEAD ADJUSTMENT PRECAUTIONS

1) Be sure to clean the heads prior to adjustment.
2) As the use of a magnetized driver or other magnetized tools in the vicinity of the heads will cause the heads to become magnetized, use only demagnetized tools for head adjustment.

VI. AMPLIFIER ADJUSTMENT

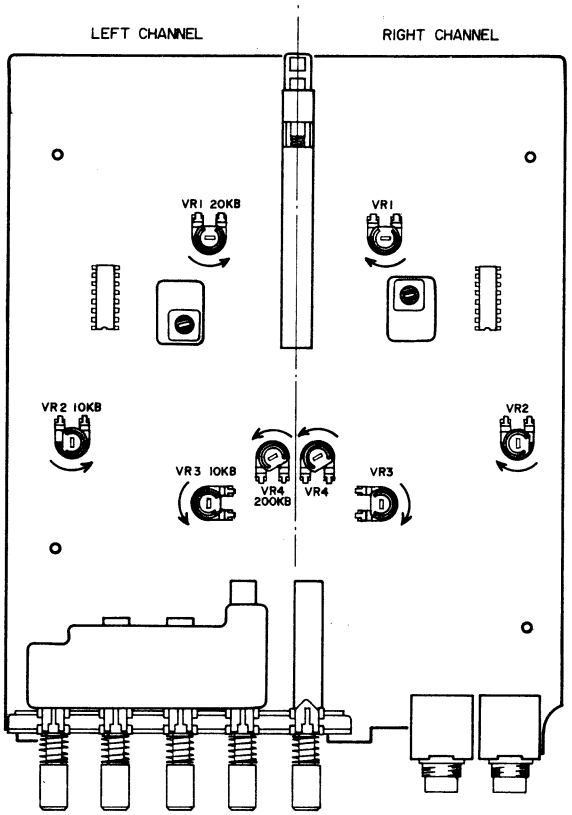


Fig. 10

NOTES:
1. Set Tape Selector to Low Noise.
2. Set Dolby N.R. Switch to OFF.
3. Set Limiter Switch to OFF.
4. After Recording Level and Frequency Response Adjustments have been made with Low Noise Tape, comfirm with Chrome and Ferri-Chrome tape only.
5. Because each of these adjustments are vital to perfect Dolby N.R. circuit operation, be sure that they are carried out with as little error as possible.
6. Use the following cassette measuring tape:

Low Noise Tape:	Fuji C-60LN
Chrome Tape:	BASF #SM Chrome C-60
Fe-Cr Tape:	SONY DUAD C-60

Step	Adjustment Item	Test Tape, Supply Signal	Mode	Adjustment Point	Result	Remarks
1	Playback Level Adjustment	333 Hz, 0 VU Test Tape	PLAY	VR1, 20 kB	−5.5 ±0.5 dBm (410 mV)	
2	VU Meter Sensitivity Adjustment	333 Hz, 0 VU Test Tape	PLAY	VR2, 10 kB	0 VU indication	
3	Recording Level Adjustment	Low Noise Blank Tape, 1,000 Hz, 0 VU recording	REC/ PLAY	VR3, 10 kB	−5.5 ±0.5 dBm (410 mV)	Refer to Note 6
4	Frequency Response Adjustment	Low Noise Blank Tape, 1,000 Hz, 10,000 Hz, −20VU recording	REC/ PLAY	VR4, 200 kB	1,000 Hz to 10,000 Hz flat response	Refer to Note 6

Chart-1

VII. DC RESISTANCE OF VARIOUS P.C BOARD

Part	Designation	DC Resistance
Recording/Playback Head	HN-424822	160 ohms
Recording/Playback Head	P4-303	110 ohms
Erase Head	WY-241Z	5.5 ohms
Solenoid	P-14W	5.0 ohms

Chart-2

VIII. CLASSIFICATION OF VARIOUS P.C BOARD

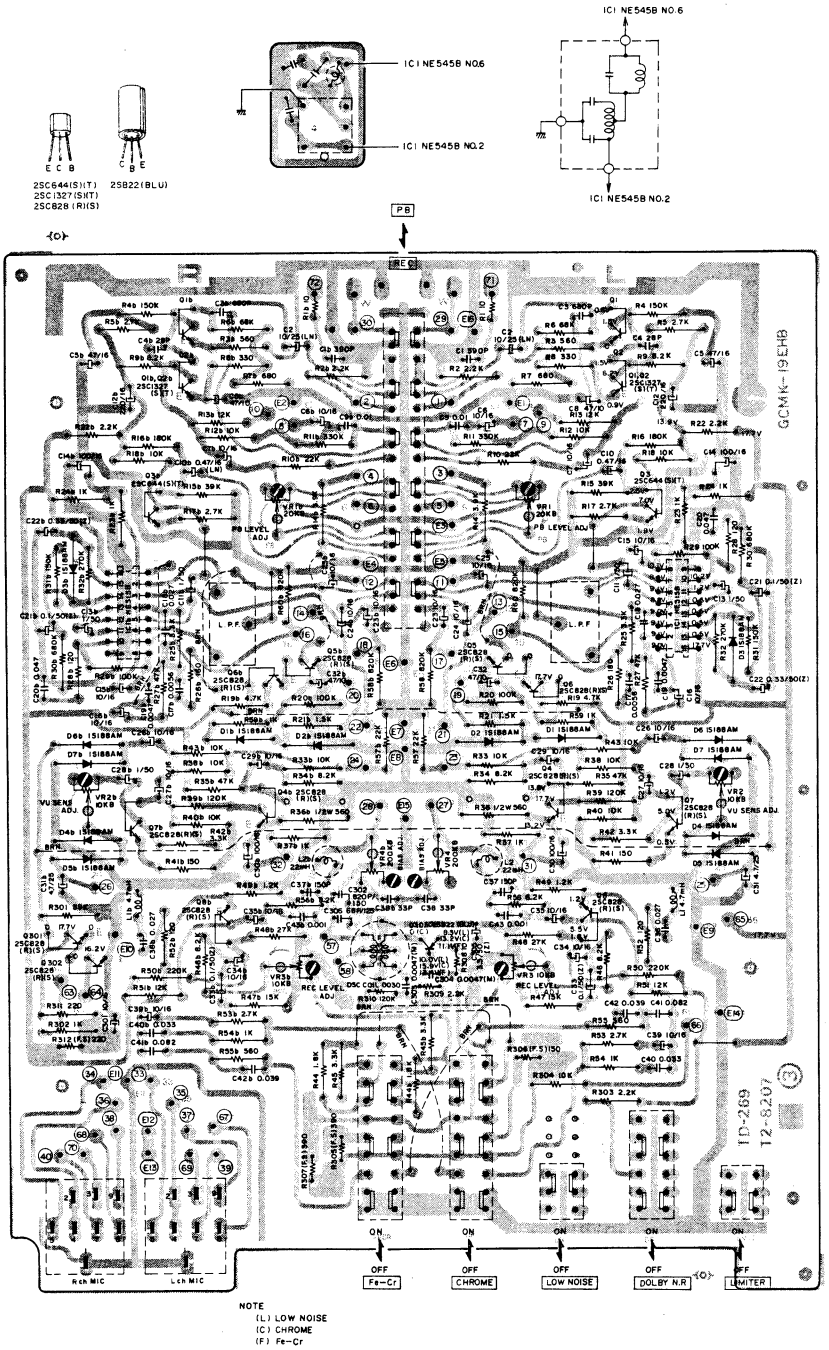
1. RELATION OF P.C BOARD TITLE AND NUMBER

P.C Board	Number of P.C Board
Main P.C Board	T2-8207
Power Supply P.C Board	T3-8220
Din Pin P.C Board	T4-8930
Mute P.C Board	T4-8938
Lamp P.C Board (A)	T4-8943
Lamp P.C Board (B)	T4-8948
LED P.C Board	T4-8952
Peak P.C Board	T4-8956
Switch P.C Board	T4-18091

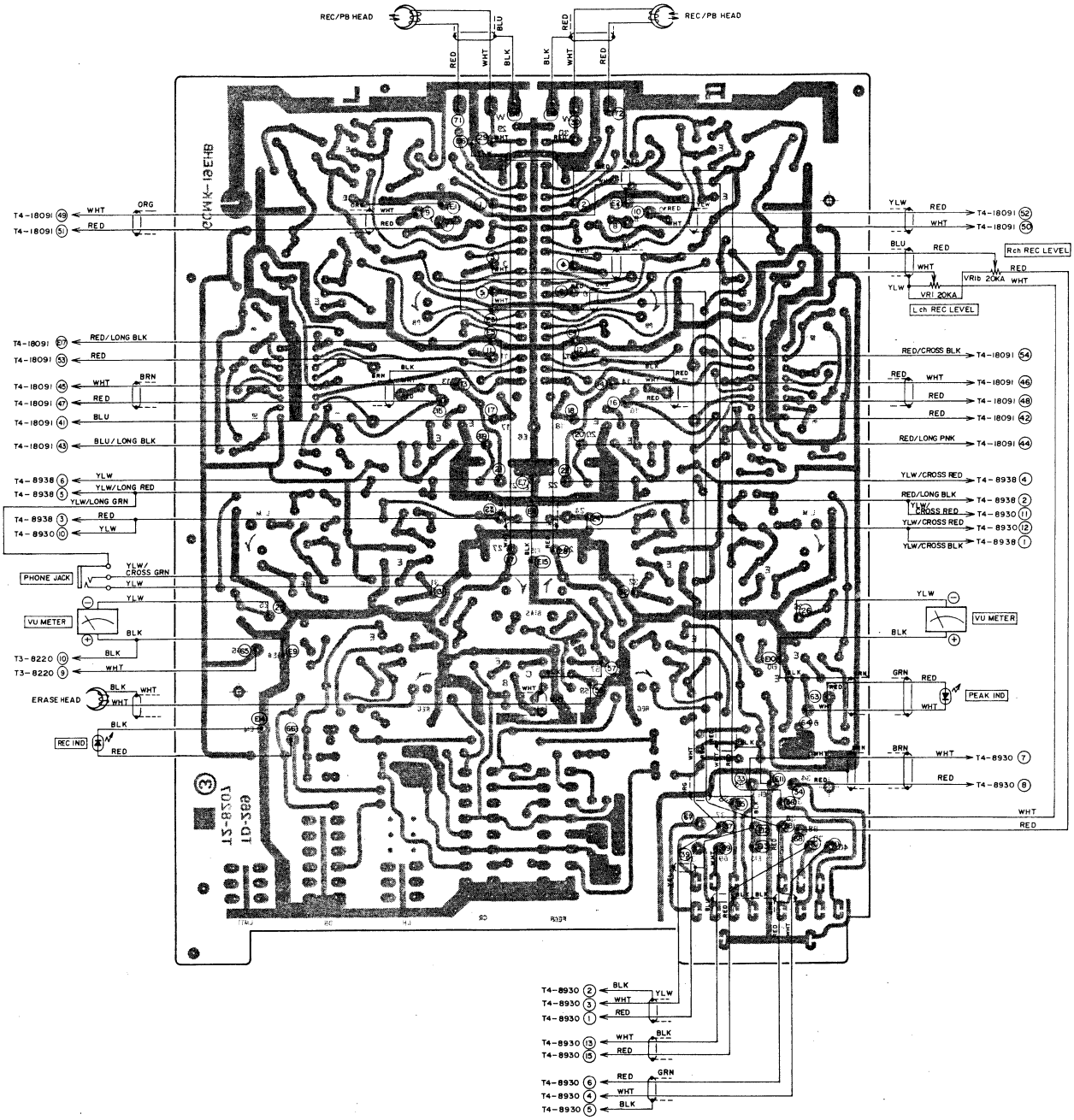
Chart-3

2. COMPOSITION OF VARIOUS P.C BOARDS

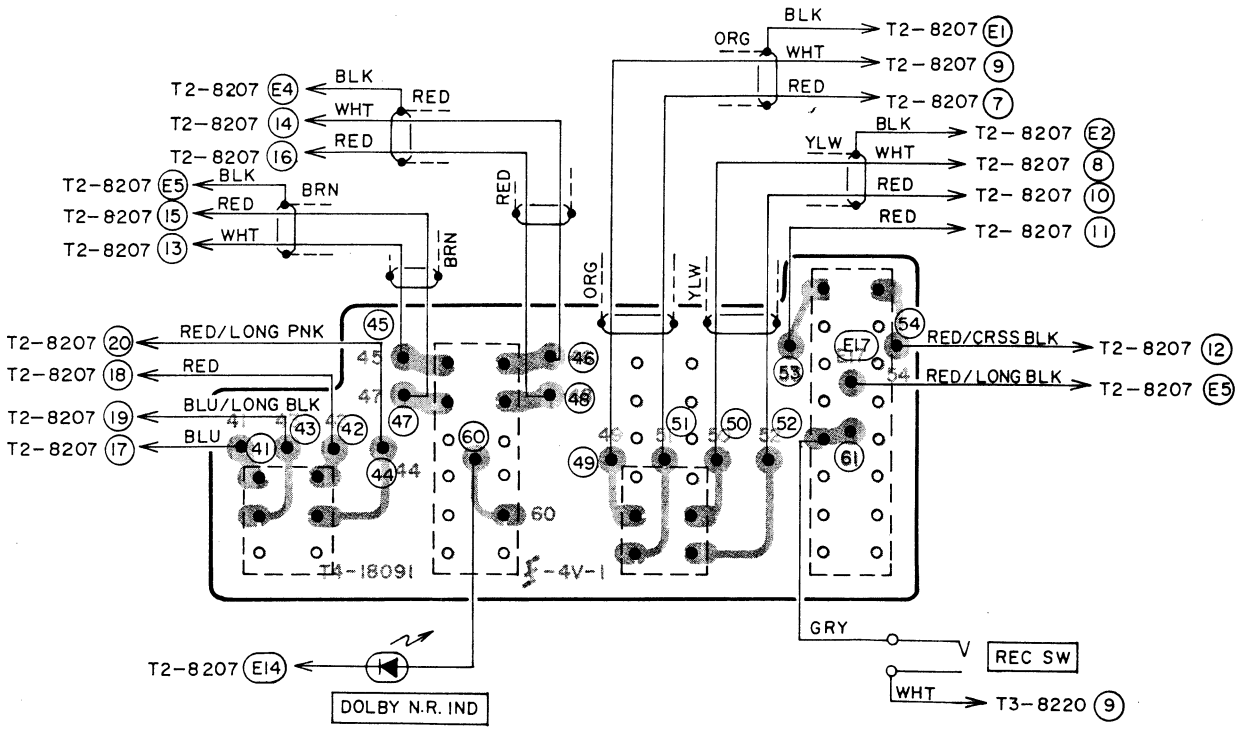
1) MAIN P.C BOARD T2-8207



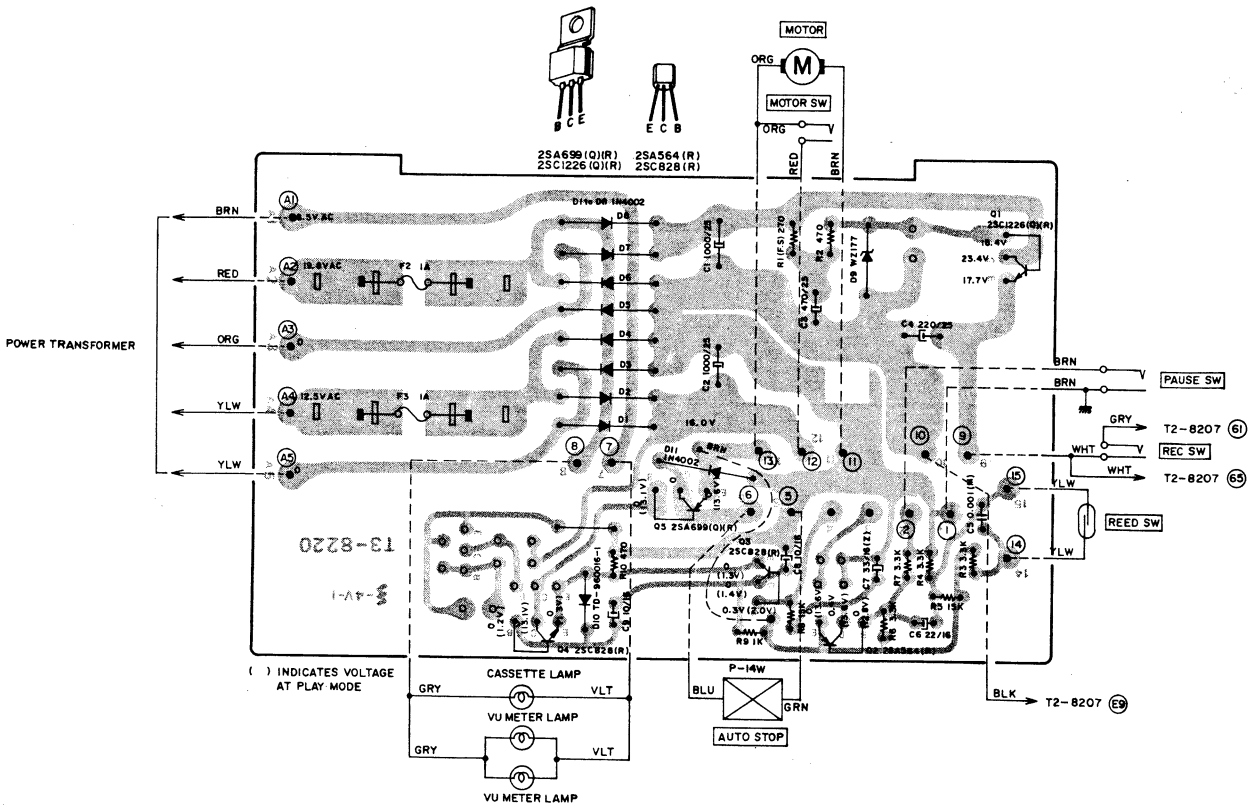
2) MAIN P.C BOARD T2-8207



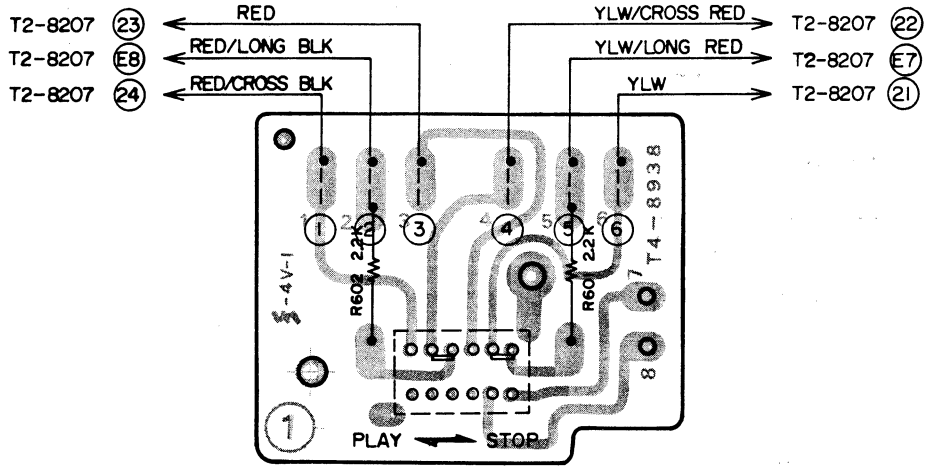
3) SWITCH P.C BOARD T4-18091



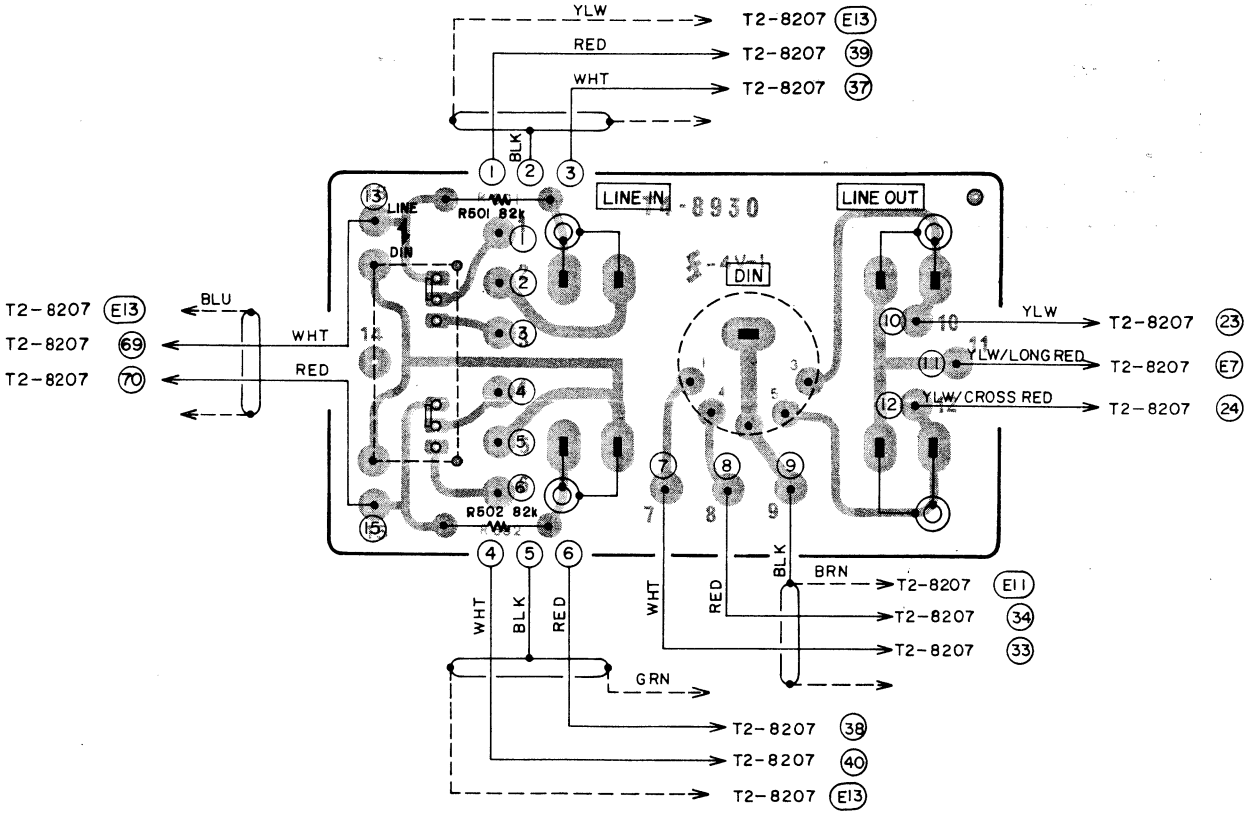
4) POWER SUPPLY P.C BOARD T3-8220



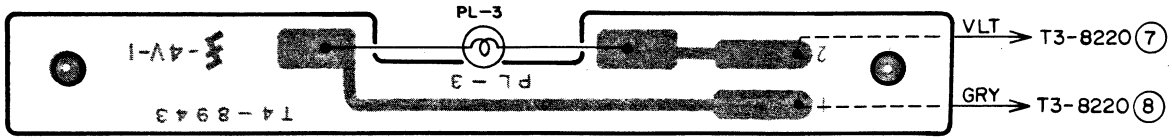
5) MUTE P.C BOARD T4-8938



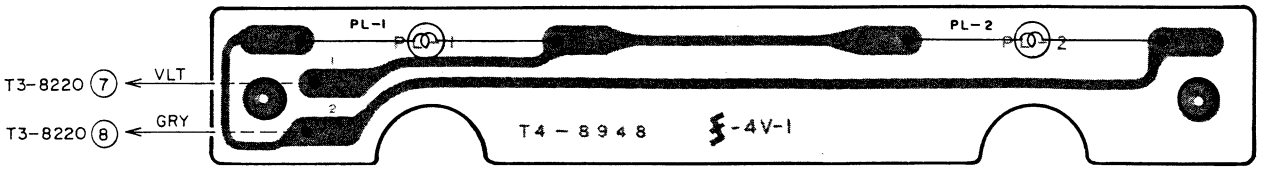
6) DIN PIN P.C BOARD T4-8930



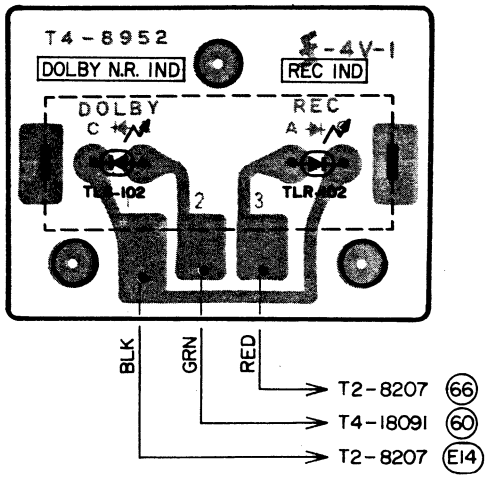
7) LAMP P.C BOARD (A) T4-8943



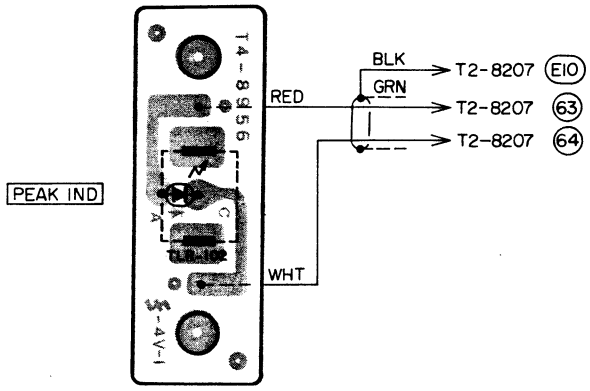
8) LAMP P.C BOARD (B) T4-8948



9) LED P.C BOARD T4-8952



10) PEAK P.C BOARD T4-8956



SECTION 2

PARTS LIST

TABLE OF CONTENTS

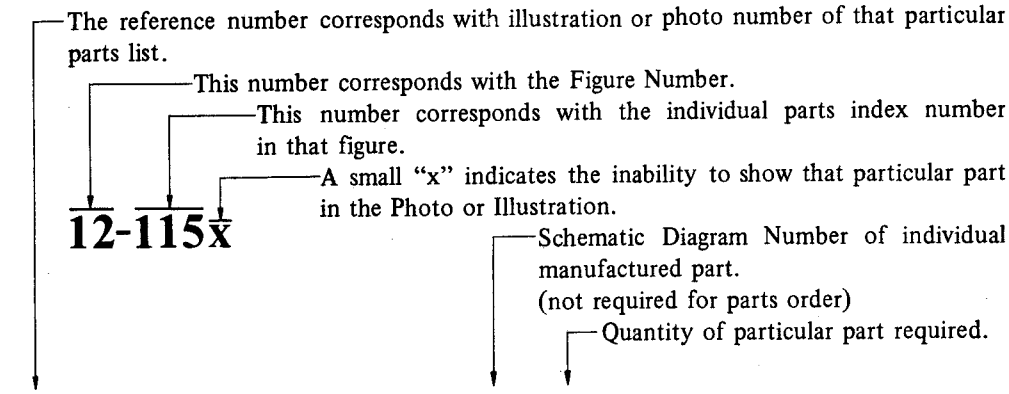
RECOMENDED SPARE PARTS LIST 25
1. MECHA BLOCK 27
2. P.C BOARDS 30
(1) MAIN P.C BOARD (T2-8207) BLOCK 30
(2) POWER SUPPLY P.C BOARD (T3-8220) BLOCK 30
(3) DIN, PIN P.C BOARD (T4-8930) BLOCK 30
(4) MUTE P.C BOARD (T4-8938) BLOCK 30
(5) LAMP P.C BOARD (T4-8943) BLOCK 31
(6) LAMP P.C BOARD (T4-8948) BLOCK 31
(7) LED P.C BOARD (T4-8952) BLOCK 31
(8) PEAK P.C BOARD (T4-8956) BLOCK 31
(9) SW. P.C BOARD (T4-18091) BLOCK 31
3. AMP CHASSIS BLOCK 32
4. FINAL ASSEMBLY BLOCK 34
INDEX 35

Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

17-20 leer

HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read list.


The reference number corresponds with illustration or photo number of that particular parts list.
This number corresponds with the Figure Number.
This number corresponds with the individual parts index number in that figure.
A small "x" indicates the inability to show that particular part in the Photo or Illustration.
12-115x
Schematic Diagram Number of individual manufactured part.
(not required for parts order)
Quantity of particular part required.

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
		FLYWHEEL BLOCK #13		
12-115x	800425	Flywheel Block Assy. Comp.	RDG#13	1
12-116	244506	Flywheel Only	RD-233	1
12-117x	244754	Felt, Flywheel	RD-275	1
12-118	251324	Main Metal Case	RD-236	1
12-119	253080	Main Metal	RD-237	1

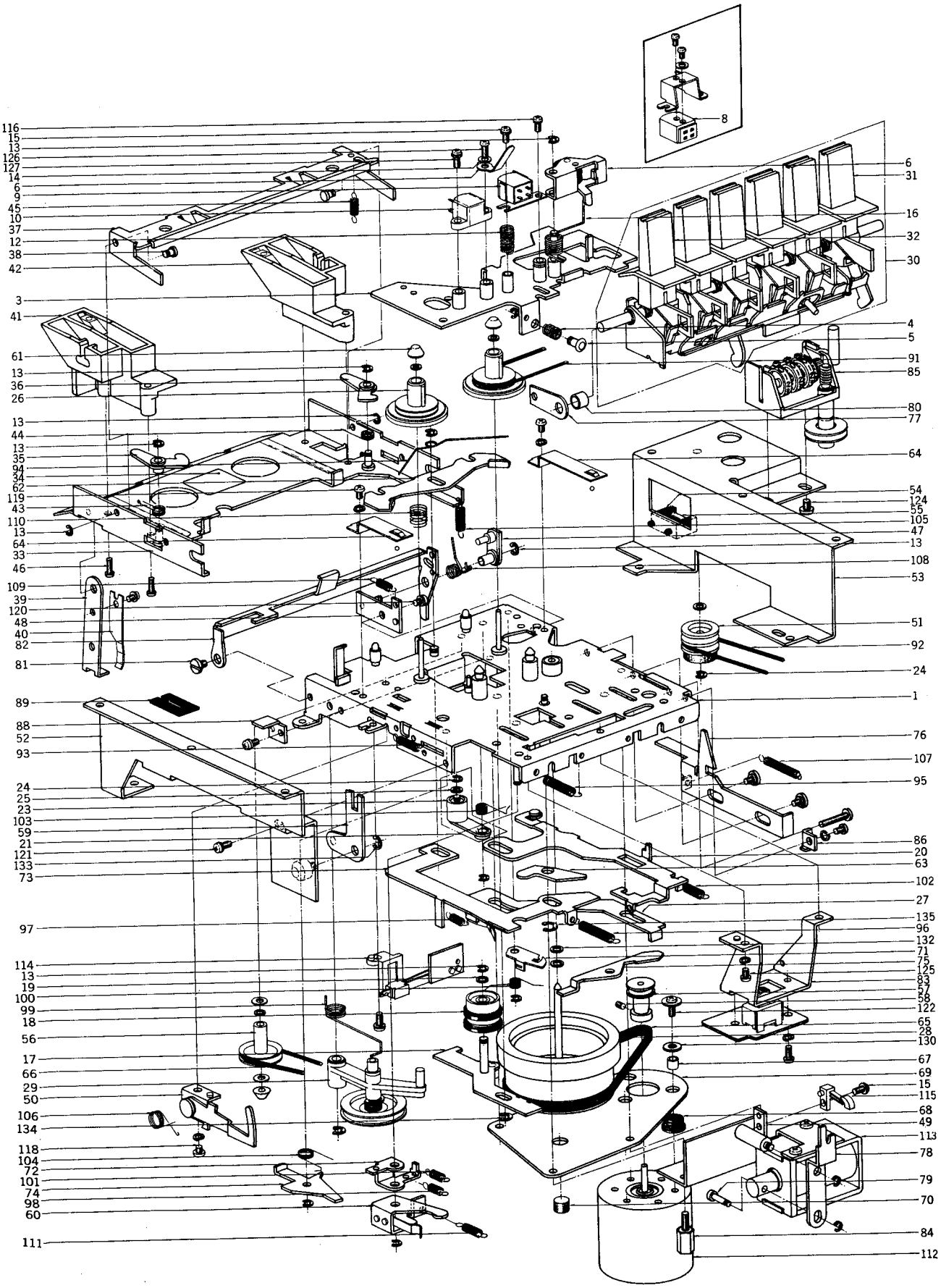
4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of components of the Schematic Diagram or Service Manual.
5. Please utilize separate "Common List for Service Parts" for Resistor parts orders.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.
   It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

RECOMENDED SPARE PARTS LIST

Parts No.	Description	Note
BA702404	Main P.C Board Comp. (T2-8207) TA2-8204	
BA707758	Power Supply P.C Board Comp. (T3-8220) TA3-8219	JPN, U/T.
BA707995	Power Supply P.C Board Comp. (T3-8220) TA3-8258	CS, UL
BA707837	Power Supply P.C Board Comp. (T3-8220) TA3-8259	CEE, BEAB
BA722316	SW. P.C Board Comp. (T4-18091) TA4-18090	
BC702775	Cabinet T2-1370	
BD700007	Front Panel Block Comp. TA2-1390	
BD700288	Lid Panel Block Comp. TA3-1534	
BF701100	Flywheel With Shaft TA4-12528	
BK700301	Operation Button Block Comp. TA2-1388	
BL700942	Pinch Roller Arm Block Comp. TA4-10335	
BL701302	Tension Arm Block Comp. TA4-7062	
BM701335	Motor MH1-5R2CHA T4-8918	
BT703708	Power Trans. PT-269 JA T4-8968	JPN
BT703978	Power Trans. PT-269 EX T4-8969	Switchable
BT706487	Power Trans. PT-269 UL T4-8970	UL, CSA
BT706937	Power Trans. PT-269 BS T4-8971	BS
BT707040	Power Trans. PT-269 SK T4-8972	CEE
EC450270	Elect./C. 1000μF 25V	
ED705047	Germanium Diode 1S188AM	D201 to 207, 101 to 107
ED511907	Silicon Diode 1N4002	D1 to 8
ED722384	Diode TD960016-1	D10
ED722395	Zener Diode WZ-177	D9
ED722564	LED TLR102 (RED)	
ED722575	LED TLG102 (GREEN)	
EI605013	IC NE545B T4-8201	
EL722542	Lamp BQ141 32111A 12V 50 mA (Fuse Type) T4-8946	
EM702382	VU Meter E-329 T4-8961	
ES722272	Slide SW. T4-8859	
ES722327	Push SW. (5-throw) SUE54 T4-8921	
ES722485	Slide SW. SS-044-B T4-8935	

Parts No.	Description	Note
ES722507	Slide SW. 22310 T4-8941	
ES701458	Power SW. SDG-1P T4-8978	JPN
ES702270	Power SW. SDG-1P T4-8979	UL
ES702371	Power SW. SDG-5P T4-8980	SEMKO
ES701987	Power SW. SDG-1P T4-8981	CSA
ET722237	Transistor 2SC1327(S)(T)	Q201, 202, 101, 102
ET722248	Transistor 2SC644(S)(T)	Q203, 103
ET234933	Transistor 2SC828(R)(S)	Q104 to 108, 204 to 208
ET722261	Transistor 2SB22 (BLUE)	Q303
ET722362	Transistor 2SC1226 (Q) (R)	Q1
ET722373	Transistor 2SA699 (Q) (R)	Q5
ET234933	Transistor 2SC828 (R)	Q3, 4
ET356984	Transistor 2SA564 (R)	Q2
EV702415	Volume 20 kA T4-8959	
HP589781	REC/PB HEAD P4-303 TA4-13687	
HP721045	REC/PB HEAD HN-424549 T4-18242	
MC701368	Tape Counter T4-13188	
MB701111	Flat Belt M62.25x5x0.4 T4-11840	
MB701122	Belt 1xM56.7 T4-11841	
SK640901	Single Knob TE-6010	
SK634410	Push Button Knob J 91-5051	

1. ILLUSTRATION OF MECHA. BLOCK



1) MECHA BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
1-1	BZ720955	Mecha Frame Comp. CS-705D (See NOTE)	TA2-1387	1
1-2x	BH720966	Head Base Block Comp. CS-705D	TA3-1624	1
1-3	BH720977	Head Base Comp. CS-705D	TA3-1625	1
1-4	ZG720988	Head Base Shaft Spring CS-705D	T4-10180	1
1-5	MS720990	Head Base Shaft CS-705D	T4-10436	1
1-6	BZ721001	Pinch Roller Arm Comp. CS-705D	TA4-13682	1
1-7	MZ721012	Wire Band CS-705D	T4-6356	1
1-8	HP589781	REC/PB HEAD P4-303 (See NOTE)	CZ, CG3, CJ	1
1-9	HP721045	REC/PB HEAD HN-424549 CS-705D (See CAUTION)	T4-18244	1
1-10	HE721056	ERASE HEAD (168-36) CS-705D (See NOTE)	T4-8807	1
1-11x	HE700468	ERASE HEAD WY-241Z CS-705D (See NOTE)	T4-7514	1
1-12	ZG717827	Head Adjust Spring CT-5	T4-5067	1
1-13	ZW358018	'E' Ring 2M	6-1-9	12
1-14	ZW721080	Flat Washer M2x0.4 CS-705D	Z4-5132	1
1-15	ZS721091	Screw, pan head w/washer M2x5 CS-705D	Z4-5551	2
1-16	ZG721102	Pinch Roller Spring CS-705D	T4-10359	1
1-17	BL721113	FR Lever Comp. CS-705D	TA4-7049	1
1-18	BZ721124	Idler A Comp. CS-705D	TA4-12545	1
1-19	ZW721135	Flat Washer M25x0.1 CS-705D	Z4-5137	2
1-20	BZ721146	Pause Function Lever Comp. CS-705D	TA4-12525	1
1-21	BZ721157	Idler B Comp. CS-705D	TA4-9511	1
1-22	BL721168	Idler B Lever Comp. CS-705D	TA4-9506	1
1-23	MI721170	Idler B CS-705D	T4-9504	1
1-24	ZW356657	'E' Ring 1.5M	6-1-9	2
1-25	ZW721181	Polyslider Washer M1.6x0.25 CS-705	Z4-5141	6
1-26	BR700986	Supply, Take-up Reel Table Block CS-705D	TA4-7102	2
1-27	BZ721203	FF Lever Comp. CS-705D	TA4-7063	1
1-28	BF701100	Flywheel w/shaft CS-705D	TA4-12528	1
1-29	BL701302	Tension Arm Block Comp. CS705D	TA4-7062	1
1-30	BK700301	Operation Button Block Comp.	TA2-1388	1
1-31	SB721247	Operation Button A CS-705D	T3-1530	5
1-32	SB721258	Operation Button B (REC) CS-705D	T3-1531	1
1-33	BZ721260	Cassette Holder Base Comp. CS-705D	TA3-1330	1
1-34	TC721271	Reflector CS-705D	T4-13498	1
1-35	BL721282	Stop Lever L Comp. CS-705D	TA4-11810	1
1-36	BL721293	Stop Lever R Comp. CS-705D	TA4-11813	1
1-37	ML721304	Cassette Detector Arm CS-705D	T3-1331	1
1-38	MH721315	Cassette Detector Arm Pin CS-705D	T4-11814	2
1-39	TC721326	Stopper CS-705D	T4-11815	1
1-40	ZG721337	Stopper Spring CS-705D	T4-13114	1
1-41	BZ721348	Cassette Guide L Comp. (Lower) CS-705D	TA4-13183	1
1-42	BZ721350	Cassette Guide R Comp. (Lower) CS-705D	TA4-13184	1
1-43	ZG721361	Stop Lever Spring L CS-705D	T4-11816	1
1-44	ZG721372	Stop Lever Spring R CS-705D	T4-11817	1
1-45	ZG721383	Cassette Detector Arm Spring CS-705D	T4-11818	1
1-46	ZS721394	Tapping Screw, pan head #2 M2x6 CS-705D	Z4-5054	4
1-47	BL721405	Limiter Lever Comp. CS-705D	TA4-11820	1
1-48	BD721416	Side Plate Comp. CS-705D	TA4-11824	1
1-49	BZ721427	Plunger Holder Comp. CS-705D	TA4-11827	1
1-50	BL721438	Play Safety Lever Comp. CS-705D	TA4-11830	1
1-51	BZ721440	Counter Idler Comp. CS-705D	TA4-13185	1
1-52	BZ721451	Mecha Installation Angle L Comp. CS-705D	TA3-1532	1
1-53	BZ721462	Mecha Installation Angle R Comp. CS-705D	TA3-1533	1
1-54	TC721473	SW. Installation Plate CS-705D	T4-11727	1
1-55	ES721484	Reed SW. (MAH-16) CS-705D	T4-8351	1
1-56	BZ721495	Idler Comp. CS-705D	TA4-12472	1
1-57	MR721506	Motor Pulley CS-705D	T4-11842	1
1-58	ZS521943	Set Screw, hexagon socket 2x3 (CUP/P.)		2
1-59	BL721517	Joint Lever Comp. CS-705D	TA4-13186	1
1-60	BL721528	Muting Lever Comp. CS-705D	TA4-13187	1
1-61	MT721530	Reel Shaft Cap CS-705D	T4-12471	3
1-62	ML721541	Brake Lever CS-705D	T4-6003	1
1-63	TC721552	Dual Lock Safety Plate CS-705D	T4-7013	1
1-64	ZG721563	Head Base Holding Spring CS-705D	T4-7016	2
1-65	MB701111	Belt (Capstan) 62.25x5x0.4 CS-705D	T4-11840	1
1-66	MB701122	Belt (Take-up) 1x56.7 CS-705D	T4-11841	1
1-67	MZ721596	Motor Installation Collar CS-705D	T4-7072	3
1-68	MB721607	Motor Installation Rubber CS-705D	T4-7840	3
1-69	MZ721618	Flywheel Set Plate CS-705D	T4-11843	1
1-70	ZS721620	Flywheel Adjust. Screw CS-705D	T4-7869	1
1-71	MZ721631	Pause Lock Plate CS-705D	T4-10218	1
1-72	ML721642	RWD Lever B CS-705D	T4-9314	1
1-73	ML721653	Brake Function Lever CS-705D	T3-702	1
1-74	ML721664	REC Lever B-5 CS-705D	T4-10453	1
1-75	ML721675	FF Lever CS-705D	T4-10586	1
1-76	ML721686	Hook Lever CS-705D	T4-11844	1
1-77	MZ721697	Support Plate CS-705D	T4-13286	2
1-78	ML721708	Shut Off Lever CS-705D	T4-11846	1
1-79	MS721710	Plunger Shaft CS-705D	T4-11847	1
1-80	TC721721	Spacer CS-705D	T4-11848	1
1-81	ZS721732	Graduated Screw M2.6 CS-705D	T4-11849	3
1-82	ML721743	Timing Lever CS-705D	T4-1334	1
1-83	TC721754	SW. Mt. Frame CS-705D	T4-13156	1
1-84	ZS721765	Screw, hexagon head M2.6 CS-705D	T4-12082	2

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
1-85	MC701368	Counter CS-705D	T4-13188	1
1-86	TC721787	Stopper Angle CS-705D	T4-12518	1
1-87x	MB721798	Rubber Cushion CS-705D	T4-12056	5
1-88	ML721800	L Angle CS-705D	T4-13669	1
1-89	TC721811	Stopper Cushion CS-705D	T4-12504	1
1-90x	TC721822	Cushion CS-705D	T4-5736	3
1-91	MB701370	Belt (Counter) CS-705D	T4-13166	1
1-92	MB701381	Belt B (Counter) CS-705D	T4-13167	1
1-93	ZG721855	Rec Safety Plate Spring CS-705D	T4-7147	1
1-94	ZG721866	Brake Lever Spring CS-705D	T4-5126	1
1-95	ZG721877	Head Base Spring CS-705D	T4-7076	1
1-96	ZG721888	Brake Function Lever Spring CS-705D	T4-7077	1
1-97	ZG721890	FF Lever Spring CS-705D	T4-7079	1
1-98	ZG721901	REW Lever Spring B CS-705D	T4-10401	1
1-99	ZG721912	Idler B Lever Spring CS-705D	T4-12624	1
1-100	ZG721923	Pause Lock Plate Spring CS-705D	T4-10456	1
1-101	ZG721934	FR Lever Spring D CS-705D	T4-7846	1
1-102	ZG721945	Pause Function Lever Spring CS-705D	T4-10360	1
1-103	ZG721956	Idler B Lever Spring CS-705D	T4-7853	1
1-104	ZG721967	REC Lever Spring B CS-705D	T4-7082	1
1-105	ZG721978	Cassette Up Spring CS-705D	T4-11855	1
1-106	ZG721980	Safety Lever Spring CS-705D	T4-11856	1
1-107	ZG721991	Hook Lever Spring CS-705D	T4-11857	1
1-108	ZG722002	Limiter Lever Spring CS-705D	T4-11858	1
1-109	ZG722013	Timing Lever Spring CS-705D	T4-13320	1
1-110	ZG722024	Back Tension Spring CS-705D	T4-5733	1
1-111	ZG722035	Muting Lever Spring CS-705D	T4-13319	1
1-112	BM701335	Motor Block Comp. MHI-5R2CHA CS-705D	T4-8918	1
1-113	EP722057	Plunger P-14R CS-705D	T4-8738	1
1-114	ES701447	Leaf SW. H-7157 CS-705D	T4-12059	1
1-115	ES722070	Leaf SW. H-7160 CS-705D	T4-8765	1
1-116	ZS722081	Screw, pan head w/s. washer M2x5 CS-705D	Z4-5077	1
1-117x	ZS722092	Screw, pan head w/spring washer M2x4 CS-705D	Z4-5074	1
1-118	ZS722103	Screw, pan head M2.6x3 CS-705D	Z4-2400	1
1-119	ZS608185	Screw, pan head 2.6x4		2
1-120	ZS722114	Screw, pan head w/spring washer M2.6x4 CS-705D	Z4-5061	5
1-121	ZS722125	Screw, pan head w/spring washer M2.6x6 CS-705D	Z4-5063	9
1-122	ZS701313	Screw, pan hand 2.6x6, w/s. washer		3
1-123x	ZS722136	Screw, binding head M2.6x14 CS-705D	Z4-5735	1
1-124	ZS323728	Screw, binding head 3x5		4
1-125	ZS722147	Tapping Screw (pan) M2.6x6 CS-705D	Z4-5035	1
1-126	ZS722158	Screw, pan head w/spring washer M2x6 CS-705D	Z4-5078	1
1-127	ZS722160	Brassiere Screw M2x6 CS-705D	Z4-5539	1
1-128x	ZW722171	Washer (Lumilar) M1.8x3x0.2 CS-705D	Z4-5194	4
1-129x	ZW722182	Flat Washer M4x0.8 CS-705D	Z4-5114	1
1-130	ZW722193	Flat Washer M2.6x0.5 CS-705D	Z4-5111	3
1-131x	ZW722204	Washer (Teflon) CS-705D	Z4-5117	2
1-132	ZW722215	Flat Washer M2.5x0.25 CS-705D	Z4-5128	2
1-133	ZW270101	'E' Ring 3M	6-1-9	4
1-134	ZW270112	'E' Ring 3.2	6-1-9	1
1-135	ZW623283	'E' Ring 4M	6-1-13	1

NOTE: 1) As a general rule the chassis and frame, etc. are not ordinarily supplied as service parts. However, because the reel table shaft and mechanical frame of this model is a single structure, an exception is being made and this is being listed as a service part.

2) The Erase Head 168-36 Parts No. HE721056 and WY-241Z Parts No. HE700468 are completely interchangeable.

CAUTION: Because two different types of heads are being used in this model, when placing your parts order, be sure to compare the illustration with the actual head to confirm that you place your order for the correct type.

Ref. No. 8 type is P4-303

Ref. No. 9 type is HN-424549

Because, as can be seen by observing the illustrations, the installation plate of these 2 heads differ, the head structures are not interchangeable. Certain units also employ No. HN-424522 head.
However, because this head is completelety interchangeable with HN-424549, please place your order for No. HN-424549.
Of the units produced to date 25,527 machines employ P4-303.
All units manufactured here-after will employ HN-42549.
Further, because P4-303 is also employed in other models (CS-34D, 30D, 33D etc) which you may have in stock, we recommend that you HN-424549 head when placing your service parts order for these models.

2. P.C BOARDS

(1) MAIN P.C BOARD (T2-8207) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(1)-1	BA702404	Main P.C Board Comp. (T2-8207)	TA2-8204	1
(1)-2	EI605013	IC SE545B	45-8-117	2
(1)-3	ET722237	Transistor 2SC1327(S,T) CS-705D		4
(1)-4	ET722248	Transistor 2SC644(S,T) CS-705D		2
(1)-5	ET722250	Transistor 2SC828(R,S) CS-705D		12
(1)-6	ET722261	Transistor 2SB22 (BLUE) CS-705D		1
(1)-7	ED705047	Germanium Diode 1S188AM	30600262	14
(1)-8	ES722272	Slide SW. (12C 2C) 122014 CS-705D	T4-8859	1
(1)-9	EJ722283	Mic. Jack LJ190-1-1 CS-705D	T4-8922	2
(1)-10	EO420344	Ferri Inductor FL7H 4.7MH(J)	23-1-3	2
(1)-11	EO492726	Ferri Inductor FL11H 22MH(J)	23-1-5	2
(1)-12	ER722294	Low Pass Filter VSL-200-15B CS-705D	T82022	2
(1)-13	EO722305	OSC. Coil 0030 CS-705D	T4-8413	1
(1)-14	EV572422	Semi-fixed/Vol. V8K1-1 20 kB	36-10-267	2
(1)-15	EV475470	Semi-fixed/Vol. V8K1-1 10 kB	36-10-267	4
(1)-16	EV536117	Semi-fixed/Vol. V8K1-1 200 kB	36-10-267	2
(1)-17	EC513977	Styrol/C. 150PF(J) 50WV (Vert. Type)	24-11-3	2
(1)-18	EC663715	Styrol/C. 820PF(J) 50WV (Vert. Type)	24-11-11	1

(2) POWER SUPPLY P.C BOARD (T3-8220) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(2)-1	BA707758	Power Supply P.C Board Comp. (T3-8220) (U/T, JPN) CS-750D	TA3-8219	1
(2)-2x	BA707995	Power Supply P.C Board Comp. (T3-8220) (CSA, U/L) CS-705D	TA3-8258	1
(2)-3x	BA707837	Power Supply P.C. Board Comp. (T3-8220) (CEE, BEAB)	TA3-8259	1
(2)-4	ET722362	Transistor 2SC1226(Q)(R) CS-705D		1
(2)-5	ET722373	Transistor 2SA699(Q)(R) CS-705D		1
(2)-6	ET234933	Transistor 2SC828(R)	45-1-23	2
(2)-7	ET356984	Transistor 2SA564(R)	45-1-44	1
(2)-8	ED511907	Silicon Diode 1N4002	45-2-51	8
(2)-9	ED722384	Diode TD960016-1 CS-705D		1
(2)-10	ED722395	Zener Diode WZ-177 CS-705D		1
(2)-11	EJ722406	Fuse Holder YSH401T (30x6) CS-705D	T4-8443	4
(2)-12x	EJ722417	Fuse Holder YSH403T (20x5) (BS)	T4-8444	4
(2)-13	EJ722428	Fuse (L=30) 1A250V (JPN) CS-705D	T4-18050	2
(2)-14	EJ722430	Fuse 1AT250V(BS) CS-705D	T4-18051	2
(2)-15	EJ722441	Fuse (L=30) 1A 125V (UL, CSA) CS-705D	T4-18052	2
(2)-16	EC722452	Aluminum Elect./C. (ECE-A) 33/16±20%		1

(3) DIN, PIN P.C BOARD (T4-8930) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(3)-1	BA702426	Din, Pin P.C Board Comp. (T4-8930)	TA4-8929	1
(3)-2	BZ722474	Din, Pin Plate Comp. CS-705D	T4-8934	1
(3)-3	ES722485	Slide SW. SS-044-B CS-705D	T4-8935	1

(4) MUTE P.C BOARD (T4-8938) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(4)-1	BA722496	Mute P.C Board Comp. (T4-8938)	TA4-8937	1
(4)-2	ES722507	Slide SW. 22310 CS-705D	T4-8941	1

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

(5) LAMP P.C BOARD (T4-8943) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(5)-1	BA722518	Lamp P.C Board Comp. (T4-8943)	TA4-8942	1
(5)-2	EL703697	Lamp (BQ141-32111A) 12V 50MA (Fuse Type)	T4-8946	1

(6) LAMP P.C BOARD (T4-8948) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(6)-1	BA722531	Lamp P.C Board Comp. (T4-8948)	TA4-8947	1
(6)-2	EL703697	Lamp (BQ141-32111A) 12V 50MA (Fuse Type)	T4-8946	2

(7) LED P.C BOARD (T4-8952) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(7)-1	BA707141	LED P.C Board Comp. (T4-8952)	TA4-8951	1
(7)-2	ED722564	LED TLR-102 CS-705D		1
(7)-3	ED722575	LED TLG-102 CS-705D		1

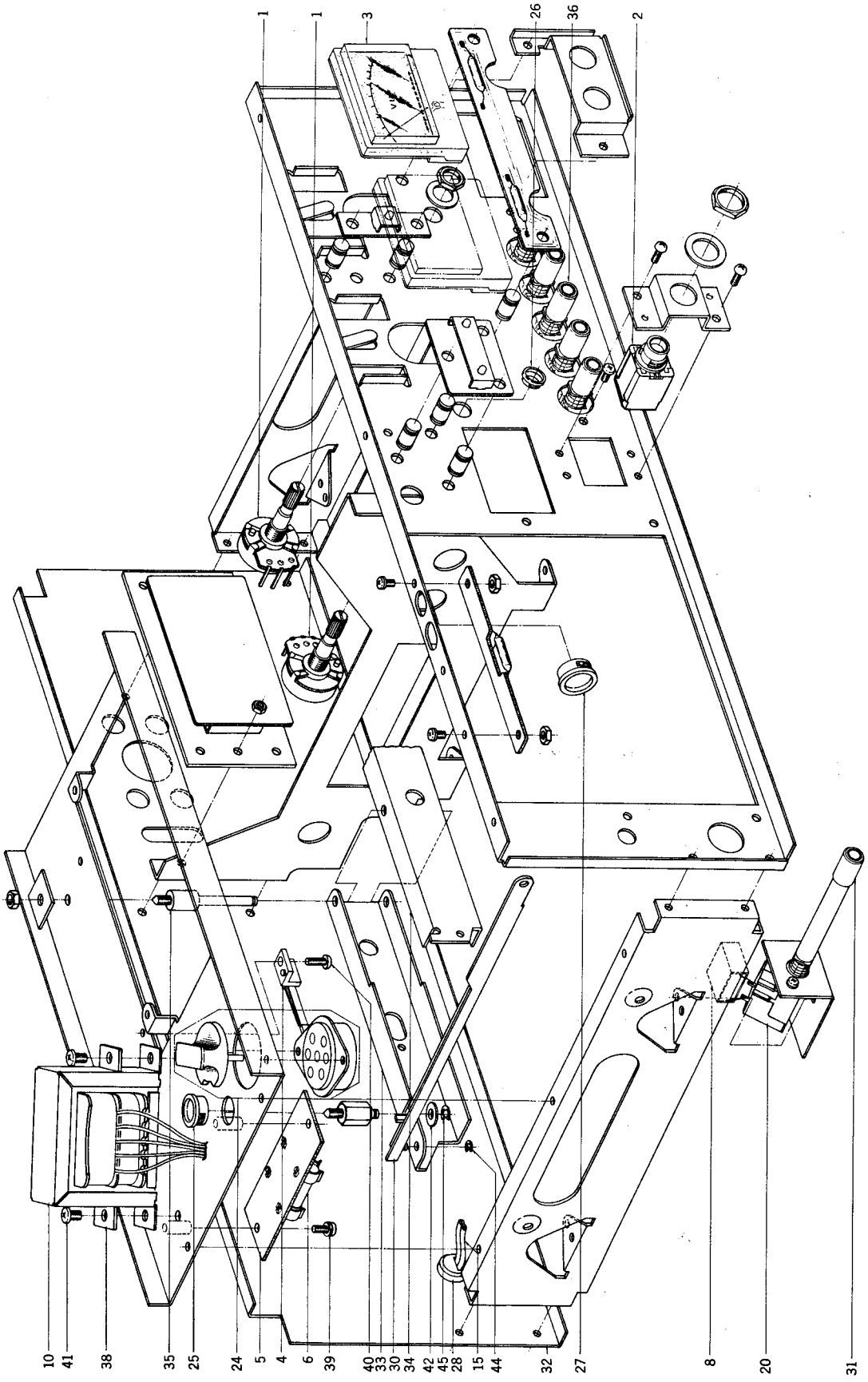
(8) PEAK P.C BOARD (T4-8956) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(8)-1	BA722586	Peak P.C Board Comp. (T4-8956)	TA4-8955	1
(8)-2	ED722564	LED TLR-102 CS-705D		1

(9) SW. P.C BOARD (T4-18091) BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
(9)-1	BA722316	SW. P.C Board Comp. (T4-18091)	TA4-18090	1
(9)-2	ES722327	Push SW. (5-throw) SUE54 CS-705D	T4-8921	1

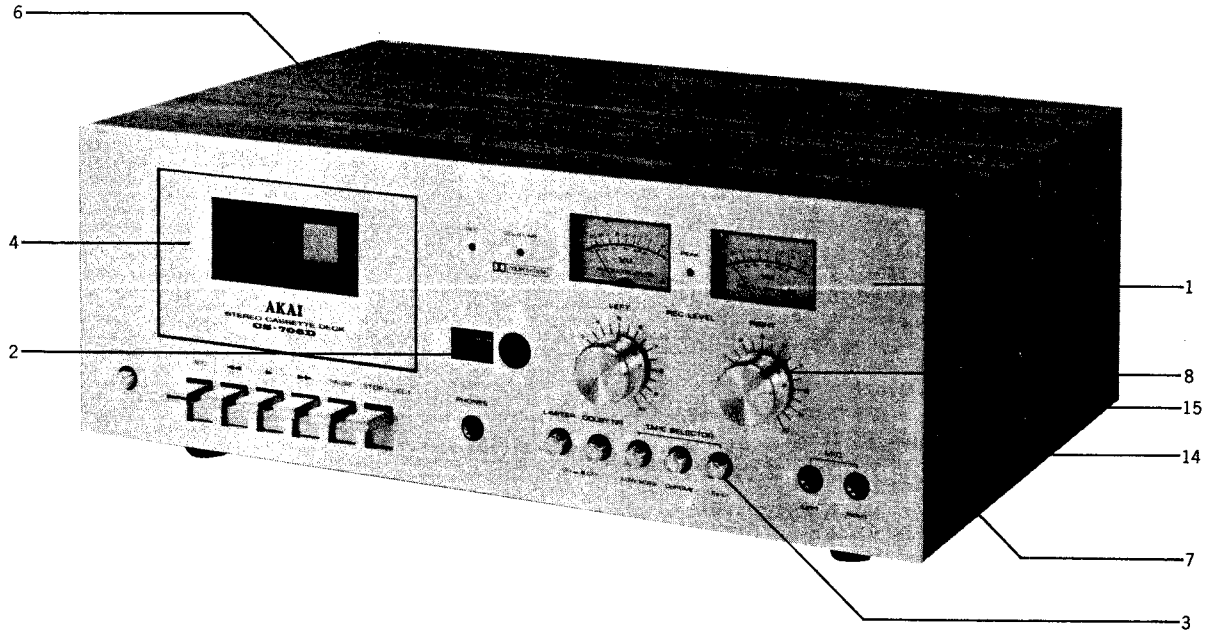
3. ILLUSTRATION OF AMP CHASSIS BLOCK



3) AMP CHASSIS BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
3-1	EV702415	Vol. 20 kA CS-705D	T4-8959	2
3-2	EJ722608	Headphone Jack LJ249-1-2 CS-705D	T4-8960	1
3-3	EM702382	VU Meter CS-705D	T4-8961	2
3-4	ES722621	Leaf SW. 4-6776-D CS-705D	T4-8964	1
3-5	EZ722632	AC Junction Board A CS-705D	T4-8965	1
3-6	EF575932	Fuse 0.8A 250V	39-1-50	1
3-7x	EF722643	Fuse (BS) 250MAT 250V CS-705D	T4-18054	1
3-8	ER226776	Spark Quencher 0.033μ+120 ohms 500WV	41-1-29	1
3-9x	ER722654	Spark Quencher C DP6600YM103P CS-705D	T4-8967	1
3-10	ET703978	Power Trans. PT-269EX CS-705D	T4-8969	1
3-11x	BT703708	Power Trans. PT-269JA CS-705D	T4-8968	1
3-12x	BT706487	Power Trans. PT-269UL CS-705D	T4-8970	1
3-13x	BT706937	Power Trans. PT-269BS CS-705D	T4-8971	1
3-14x	BT707040	Power Trans. PT-269SK CS-705D	T4-8972	1
3-15	EW540123	AC Cord 2.5M (CUL)	26-3-20	1
3-16x	EW557640	AC Cord 2.5M (JPN)	26-3-32	1
3-17x	EW604585	AC Cord (BSI)	26-3-37	1
3-18x	EW641248	AC Cord Type-405 (CEE)	26-3-35	1
3-19x	EW486797	AC Cord VM-0079 (VDE)	26-3-26	1
3-20	ES701458	Power SW. SDG-1P (U/T, JPN) CS-705D	T4-8978	1
3-21	ES702270	Pow er SW. (U/L) CS-705D	T4-8979	1
3-22x	ES702371	Power SW. SD-G-5P (SEMKO) CS-705D	T4-8980	1
3-23x	ES701987	Power SW. (CSA) CS-705D	T4-8981	1
3-24	EJ722755	Volt Selector 1-02-0035-00 CS-705D	T4-8982	1
3-25	EZ722766	Mini. Bushing B-500, 375-062 CS-705D	T4-8983	1
3-26	EZ722777	Mini. Bushing CS-705D	T4-8917	1
3-27	EZ722788	Mini. Bushing CS-705D	T4-18138	1
3-28	EZ722790	Cord Bushing 4N-4 CS-705D	T4-10595	1
3-29	EZ722801	Snap Bushing SB-562-7 CS-705D	T4-18045	1
3-30	BL722812	Rec Connecting Lever Comp. CS-705D	TA4-13192	1
3-31	BS722823	Power SW. Button Comp. CS-705D	TA4-13164	1
3-32	SP722834	Rear Panel CS-705D	T2-1392	1
3-33	ML722845	Rec Operation Lever A CS-705D	T4-13153	1
3-34	ML722856	Rec Operation Lever B CS-705D	T4-13154	1
3-35	MS722867	Rec Operation Lever Shaft CS-705D	T4-13172	1
3-36	SK634410	Push Button Knob J	91-5051	5
3-37x	ZG722878	Spring CS-705D	T4-13197	1
3-38	MZ722880	Trans. Stay CS-705D	T4-13088	2
3-39	ZS608321	Screw, pan head 3x6, w/washer		16
3-40	ZS553994	Tapping Screw #1 3x8 (Round)		33
3-41	ZS722891	Tap-Tite Screw (pan) M3x0.5x8 CS-705D	Z4-5597	2
3-42	ZW722902	Washer D3.3x14 CS-705D	Z4-5832	1
3-43x	ZW358018	'E' Ring 2M	6-1-9	1
3-44	ZW410051	'E' Ring 2.5	6-1-9	1
3-45	ZW270101	'E' Ring 3M	6-1-9	1
3-46x	EM702393	VU Meter (JPN) (Yellow) CS-705D	T4-18146	1

4. PHOTO OF FINAL ASSEMBLY BLOCK



4) FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
4-1	BD700007	Front Panel Block Comp. CS-705D	TA2-1390	1
4-2	SE630156	Counter Escutcheon	CJ-6007	1
4-3	SE613888	Button Escutcheon A	CW-6021	6
4-4	BD700288	Lid Panel Block Comp. CS-705D	TA3-1534	1
4-5x	TC722935	Lid Supporting Plate CS-705D	T4-13104	2
4-6	BC702775	Cabinet CS-705D	T2-1370	1
4-7	SP722957	Bottom Plate CS-705D	T2-1372	1
4-8	SK640901	Single Knob	TE-6010	2
4-9x	SZ645243	Circular Foot A	CA-6014	4
4-10x	ZS722968	Tap-Tite Screw (Bind) w/washer M3x0.5x8 CS-705D	Z4-5761	4
4-11x	ZW722970	Spacer 0.8t CS-705D	T4-12542	3
4-12x	ZS722981	Screw, (bind) (BLK) M3x0.5x8 CS-705D	Z4-5570	2
4-13x	ZS553994	Tapping Screw #1 3x8 (round)		8
4-14	ZS722992	Tap-Tite Screw, (bind) M4x12 CS-705D	Z4-5733	4
4-15	ZW548010	Spot Facing Washer	MU-6028	4
4-16x	ZW590207	Nut M3 #3		6
4-17x	ZW723003	Washer (PC) D3x6x0.25 CS-705D	Z4-5124	10

INDEX

Parts No.	Ref. No. & Symbol No.
BA702404	(1)-1
BA702426	(3)-1
BA707141	(7)-1
BA707758	(2)-1
BA707837	(2)-3x
BA707995	(2)-2x
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BA722496	(4)-1
BA722518	(5)-1
BA722531	(6)-1
BA722586	(8)-1
BC702775	4-6
BD700007	4-1
BD700288	4-4
BD721416	1-48
BF701100	1-28
BH720966	1-2x
BH720977	1-3
BK700301	1-30
BL701302	1-29
BL721113	1-17
BL721168	1-22
BL721282	1-35
BL721293	1-36
BL721405	1-47
BL721438	1-50
BL721517	1-59
BL721528	1-60
BL722812	3-30
BM701335	1-112
BR700986	1-26
BS722823	3-31
BT703708	3-11x
BT703978	3-10
BT706487	3-12x
BT706937	3-13x
BT707040	3-14x
BZ720955	1-1
BZ721001	1-6
BZ721124	1-18
BZ721146	1-20
BZ721157	1-21
BZ721203	1-27
BZ721260	1-33
BZ721348	1-41
BZ721350	1-42
BZ721427	1-49
BZ721440	1-51
BZ721451	1-52
BZ721462	1-53
BZ721495	1-56
BZ722474	(3)-2
EC513977	(1)-17
EC663715	(1)-18
EC722452	(2)-16
ED511907	(2)-8
ED705047	(1)-7
ED722384	(2)-9
ED722395	(2)-10
ED722564	(7)-2
ED722564	(8)-2
ED722575	(7)-3
EF575932	3-6
EF722643	3-7x
EI605013	(1)-2
EJ722283	(1)-9
EJ722406	(2)-11
EJ722417	(2)-12x
EJ722428	(2)-13
EJ722430	(2)-14
EJ722441	(2)-15
EJ722608	3-2
EJ722755	3-24
EL703697	(5)-2
EL722542	(6)-2
EM702382	3-3
EM702393	3-46x
EO420344	(1)-10
EO492726	(1)-11
EO722305	(1)-13
EP722057	1-113
ER236776	3-8
ER722294	(1)-12
ER722654	3-9x
ES701447	1-114
ES701458	3-20
ES701987	3-23x
ES702270	3-21x
ES702371	3-22x
ES721484	1-55
ES722070	1-115
ES722272	(1)-8
ES722327	(9)-2
ES722485	(3)-3
ES722507	(4)-2
ES722621	3-4
ET234933	(2)-6
ET356984	(2)-7
ET722237	(1)-3
ET722248	(1)-4
ET722250	(1)-5
ET722261	(1)-6
ET722362	(2)-4
ET722373	(2)-5
EV475470	(1)-15
EV536117	(1)-16
EV572422	(1)-14
EV702415	3-1
EW486797	3-19x
EW540123	3-15
EW557640	3-16x
EW604585	3-17x
EW641248	3-18x
EZ722632	3-5
EZ722766	3-25
EZ722777	3-26
EZ722788	3-27
EZ722790	3-28
EZ722801	3-29
HE700468	1-11x
HE721056	1-10
HP589781	1-8
HP721045	1-9
MB701111	1-65
MB701122	1-66
MB701370	1-91
MB701381	1-92
MB721607	1-68
MB721798	1-87x
MC701368	1-85
MH721315	1-38
MI721170	1-23
ML721304	1-37
ML721541	1-62
ML721642	1-72
ML721653	1-73
ML721664	1-74
ML721675	1-75
ML721686	1-76
ML721708	1-78
ML721743	1-82
ML721800	1-88
ML722845	3-33
ML722856	3-34
MR721506	1-57
MS720990	1-5
MS721710	1-79
MS722867	3-35
mT721530	1-61
MZ721012	1-7
MZ721596	1-67
MZ721618	1-69
MZ721631	1-71
MZ721697	1-77
MZ722880	3-38
SB721247	1-31
SB721258	1-32
SE613888	4-3
SE630156	4-2
SK634410	3-36
SK640901	4-8
SP722834	3-32
SP722957	4-7
SZ645243	4-9x
TC721271	1-34
TC721326	1-39
TC721473	1-54
TC721552	1-63
TC721721	1-80
TC721754	1-83
TC721787	1-86
TC721811	1-89
TC721822	1-90x
TC722935	4-5x
ZG717827	1-12
ZG720988	1-4
ZG721102	1-16
ZG721337	1-40
ZG721361	1-43
ZG721372	1-44
ZG721383	1-45
ZG721563	1-64
ZG721855	1-93
ZG721866	1-94
ZG721877	1-95
ZG721888	1-96
ZG721890	1-97
ZG721901	1-98
ZG721912	1-99
ZG721923	1-100
ZG721934	1-101
ZG721945	1-102
ZG721956	1-103
ZG721967	1-104
ZG721978	1-105
ZG721980	1-106
ZG721991	1-107
ZG722002	1-108
ZG722013	1-109
ZG722024	1-110
ZG722035	1-111
ZG722878	3-37x
ZS323728	1-124
ZS521943	1-58
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ZS553994	4-13x
ZS608185	1-119
ZS608321	3-39
ZS701313	1-122
ZS721091	1-15
ZS721394	1-46
ZS721620	1-70
ZS721732	1-81
ZS721765	1-84
ZS722081	1-116
ZS722092	1-117x
ZS722103	1-118
ZS722144	1-120
ZS722125	1-121
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ZS722147	1-125
ZS722158	1-126
ZS722160	1-127
ZS722891	3-41
ZS722968	4-10x
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ZW270101	1-133
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ZW548010	4-15
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ZW623283	1-135
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ZW721181	1-25
ZW722171	1-128x
ZW722182	1-129x
ZW722193	1-130
ZW722204	1-131x
ZW722215	1-132
ZW722902	3-42
ZW722970	4-11x
ZW723003	4-17x

SECTION 3

SCHEMATIC DIAGRAM

1. CS-705D SCHEMATIC DIAGRAM

AKAI

No. 1

PRELIMINARY SERVICE MANUAL

MODEL CS-705D

DATE June 1976

Technical Data	
1) Track System	4 track 2 channel stereo system
2) Tape Speed	1-7/8 ips
3) Wow and Flutter	Less than 0.08% WRMS (NAB) Less than 0.24% (DIN 45507)
4) Frequency Response	35 to 14,000 Hz ±3 dB using Low Noise tape 35 to 15,000 Hz ±3 dB using Chrome tape 35 to 16,000 Hz ±3 dB using Fe-Cr tape
5) Distortion	Less than 1.5% using Low Noise tape (1,000 Hz "0" VU)
6) Signal to Noise Ratio	Better than 51 dB (measured via tape with peak recording level of +3 VU) Dolby Switch ON: Improves up to 10 dB above 5 kHz
7) Erase Ratio	Better than 70 dB
8) Bias Frequency	85 kHz
9) Heads	(2): One Recording/Playback Head, One Erase Head
10) Motor	(1): Electronically Speed Controlled DC Motor
11) FF and RWD Time	80 sec using a C-60 cassette tape
12) Output Jacks	Line(2): 410 mV("0" VU)/Required load impedance: more than 20 k ohms Phone(1): 50 mV/8 ohms
13) Input Jacks	Microphone(2): 0.3 mV/Required microphone impedance: 600 ohms Line(2): 70 mV/100 k ohms
14) DIN Jack	Input 0.3 mV/Output 410 mV
15) Semiconductors	Transistors 24, Diodes 25, ICs 2
16) Power Requirements	CSA, UL and LA Models: 120V, 60 Hz only CEE Models: 220V, 50 Hz only Other Models: 110/120/220/240V, 50/60 Hz(Switchable)
17) Dimensions	440(W)x165(H)x300(D)mm, (17.3"x6.4"x11.8")
18) Weight	6.8 kg (15.0 lbs)

Noise reduction circuit made under license from Dolby Laboratories Inc. The word 'DOLBY' and the Double-D symbol are trademarks of Dolby Laboratories Inc.

AKAI ELECTRIC CO., LTD.
(P.O.BOX 21, Tokyo International Airport, Japan)
12-14, 2-chome, Higashi-Kojiya, Ohta-ku, Tokyo, Japan
Printed in Japan

1. Principal parts location

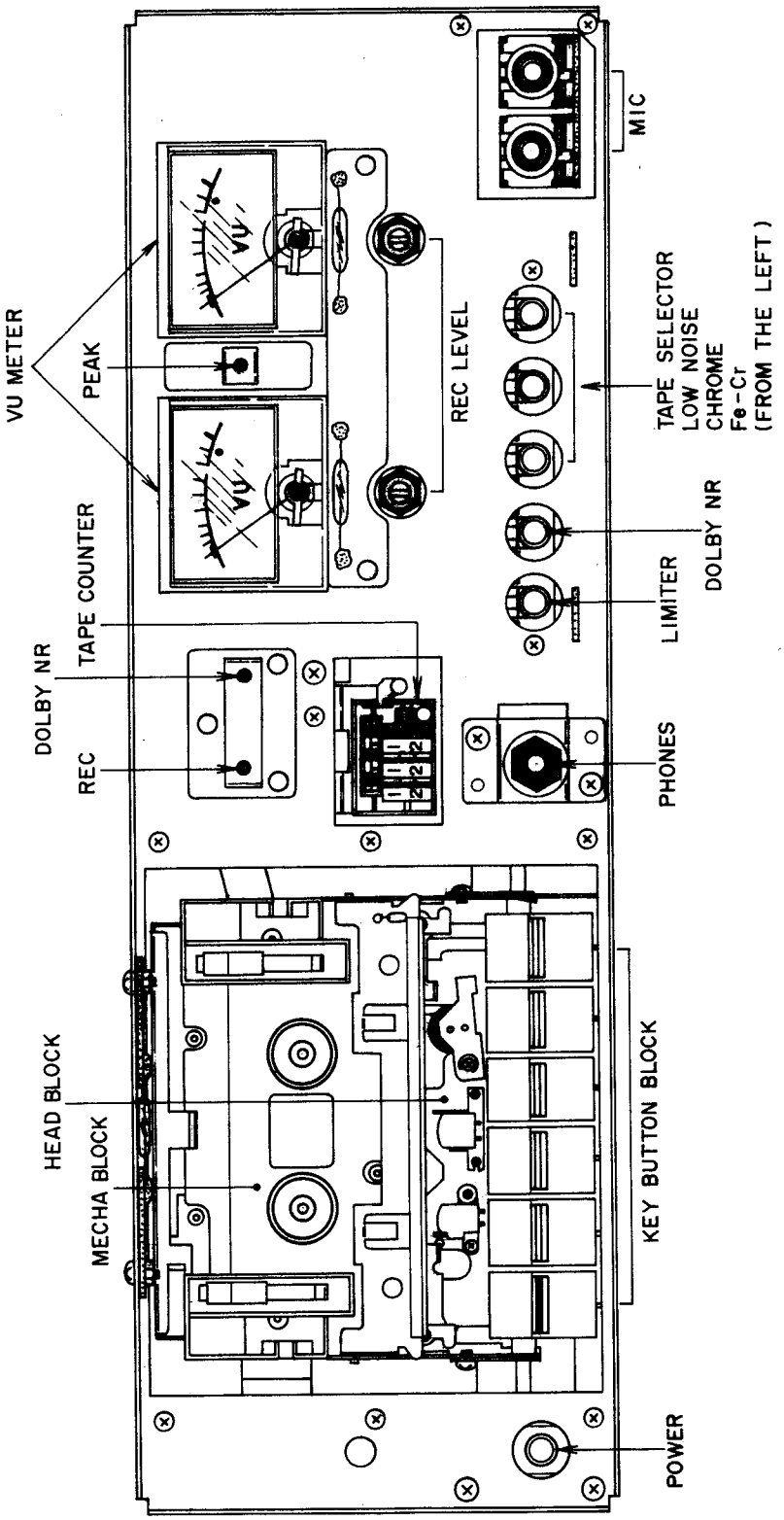


Fig. 1 Front view

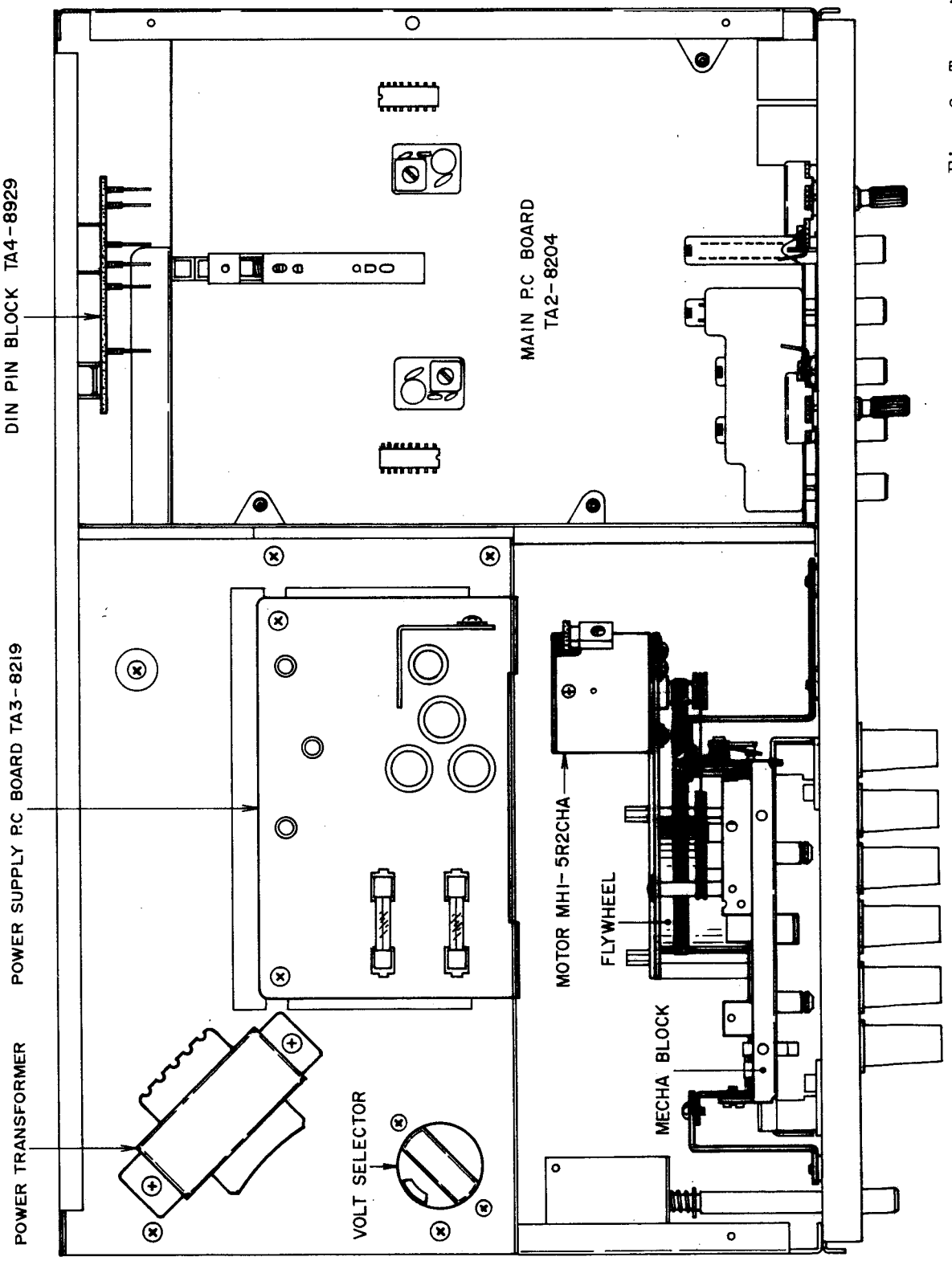


Fig. 2 Top view

2. Mechanism Adjustment

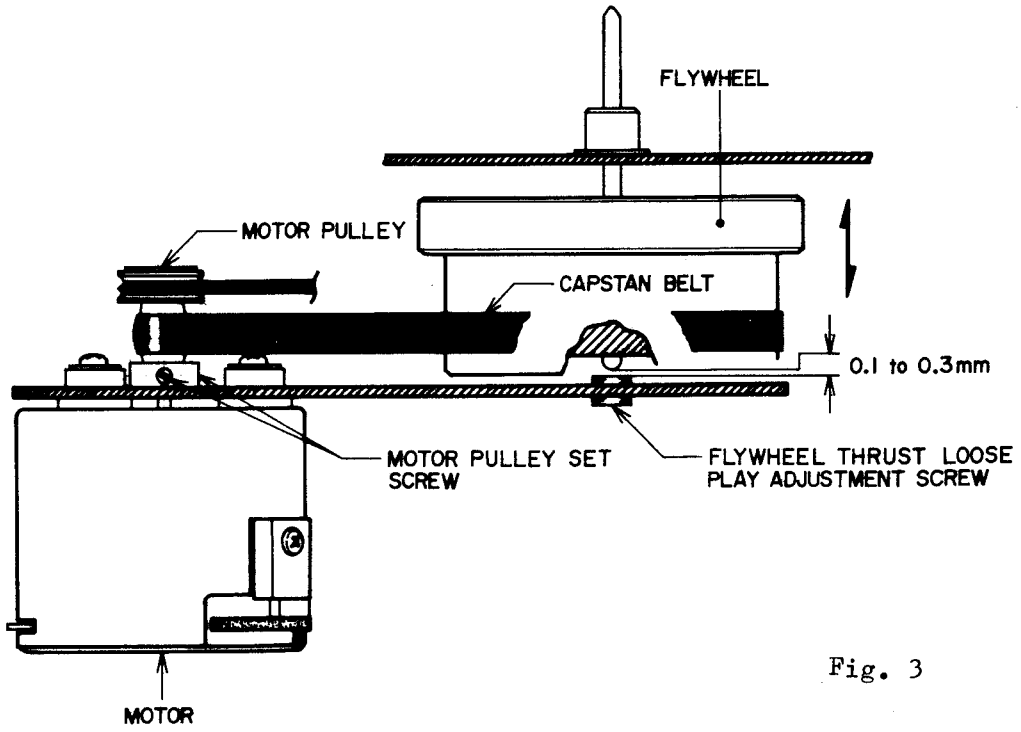


Fig. 3

1) Flywheel Thrust Loose Play Adjustment (Refer to Fig. 3)

Adjust by turning flywheel thrust loose play adjustment screw to obtain a 0.1 to 0.3 mm of loose play when the flywheel is moved as indicated by the arrow mark.

Paint lock the adjustment screw.

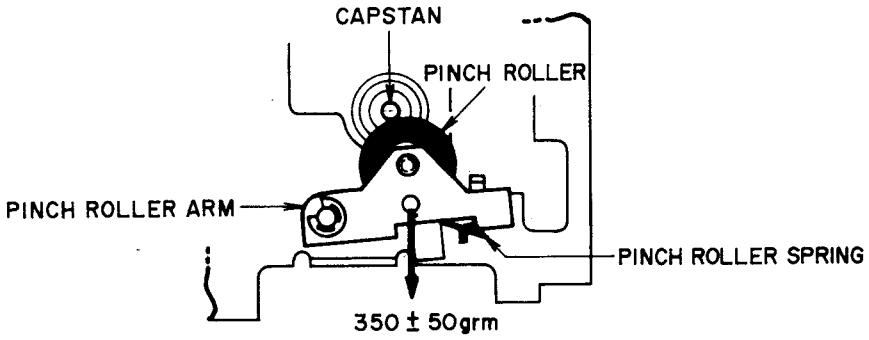


Fig. 4 Pinch roller pressure measurement

2) Pinch Roller Pressure Measurement (Refer to Fig. 4)

At the playback mode, pull back the pinch roller with a spring gauge until the pinch roller separates from the capstan by about 1mm to 2mm and then gently return.

Take a reading of the spring gauge indication at the moment the pinch roller touches the capstan and begins to rotate.

Specified Pinch Roller Pressure: 350 $\pm$50 grm

In case specified pressure cannot be attained, replace the pinch roller spring.

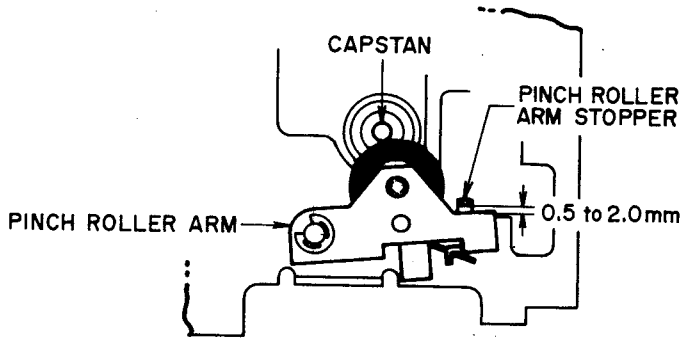


Fig. 5 Gap between pinch roller arm and stopper

3) Adjustment of Gap between the Pinch Roller Arm and Stopper (Refer to Fig. 5)

Adjust by bending the pinch roller stopper so that a 0.5 to 2.0 mm gap is definitely obtained between the pinch roller arm and the pinch roller arm stopper when the machine is set to play mode.

4) Take-up Torque at various modes

Playback mode:	40 to 65 grm-cm
Fast Forward mode:	70 to 130 grm-cm
Rewind mode:	70 to 130 grm-cm

In case specified take-up torque cannot be attained,

Playback mode:	replace whole tension arm block comp.
Fast Forward or Rewind mode:	replace idler A comp.

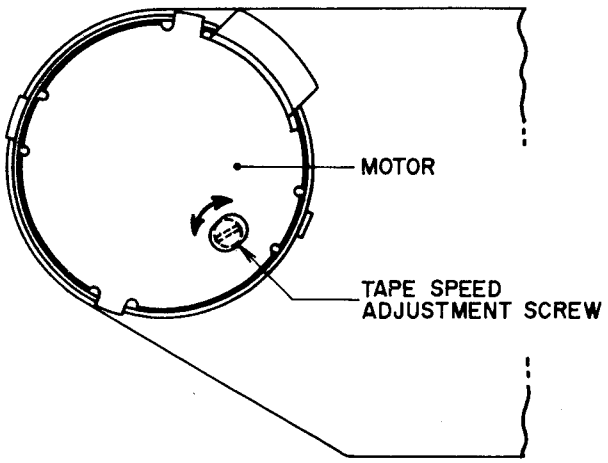


Fig. 6 Tape speed adjustment

5) Tape Speed Adjustment (Refer to Fig. 6)

Playback a 1,000 Hz pre-recorded test tape and adjust tape speed adjustment screw to obtain a tape speed of 1,000 Hz $\pm$1%.

3. Head Adjustment

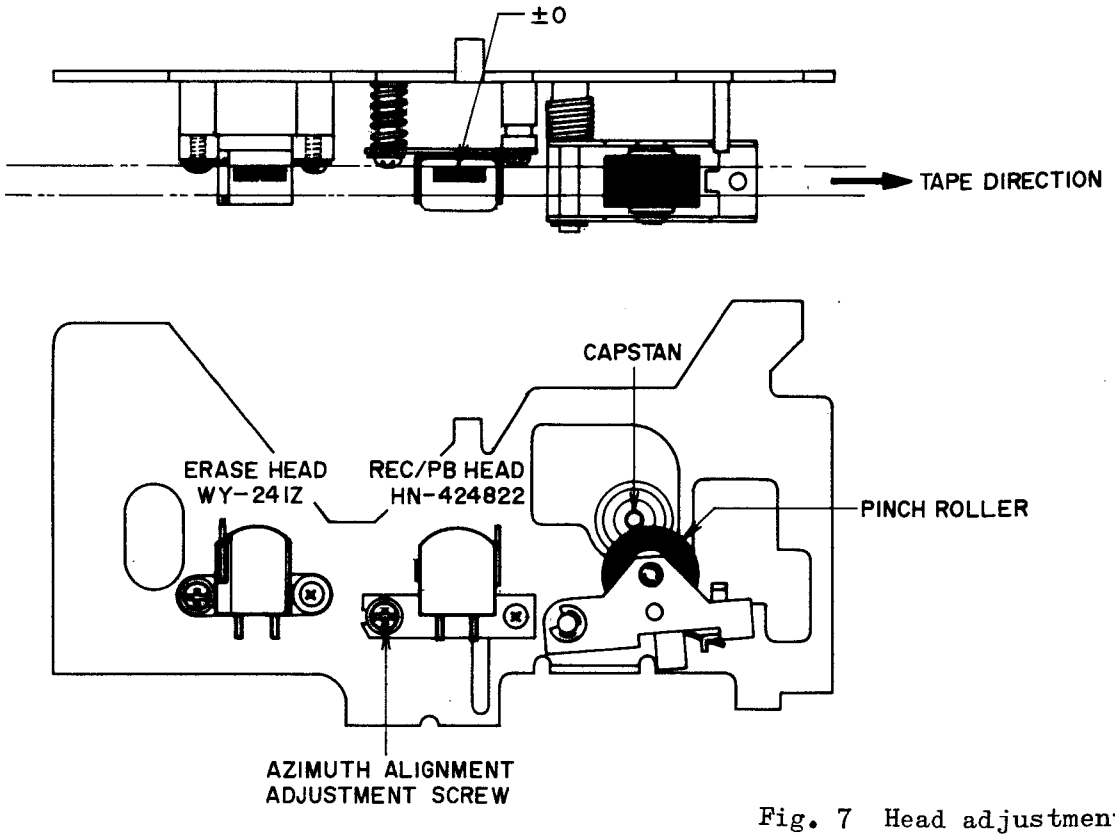


Fig. 7 Head adjustment

1) Recording/Playback Head Azimuth Alignment Adjustment
Playback a 10 kHz pre-recorded cassette azimuth alignment test tape and adjust recording/playback head azimuth alignment adjustment screw to obtain maximum output and an in-phase condition.

2) Head Adjustment Precautions
* Be sure to clean the heads prior to adjustment.
* As the use of a magnetized driver or other magnetized tools in the vicinity of the heads will cause the heads to become magnetized, use only demagnetized tools for head adjustment.

4. Amplifier Adjustment

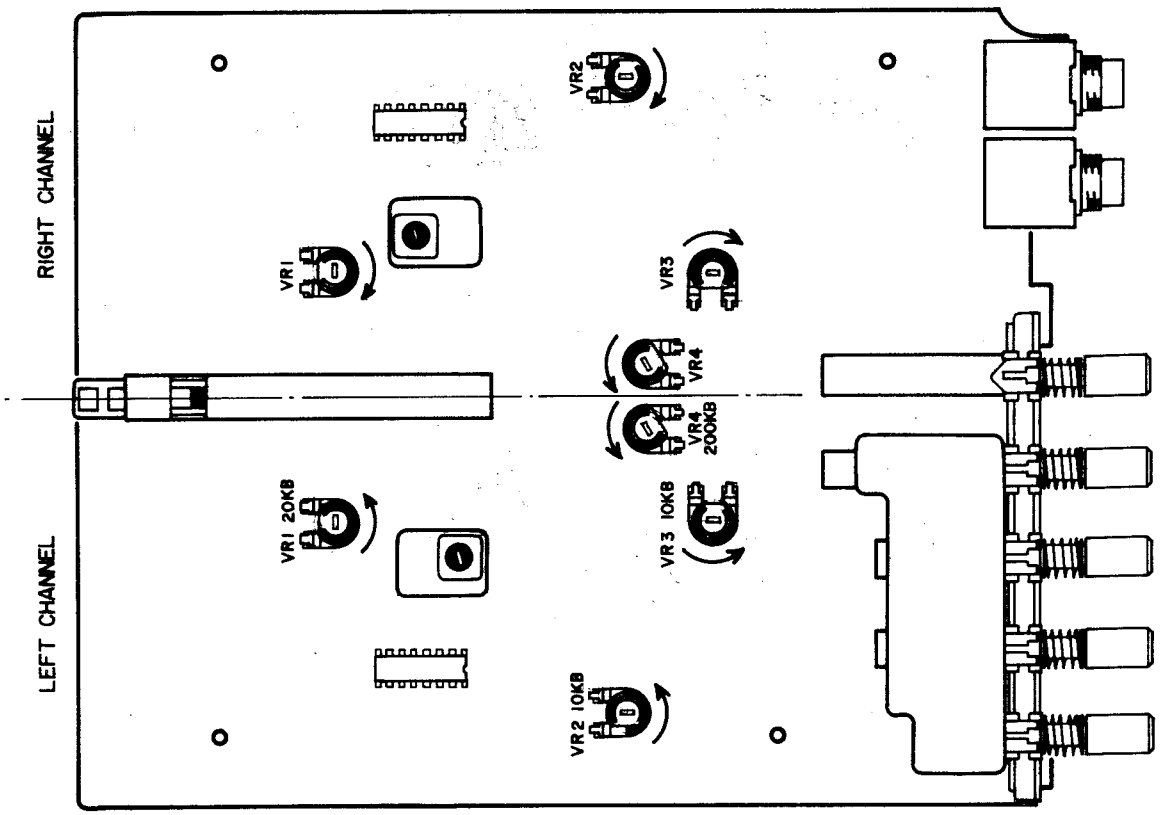


Fig. 8 Main P.C Board TA2-8205

Step	Adjustment Item	Test Tape, Supply Signal	Mode	Adjustment Poist	Result	Remarks
1	Playback Level Adjustment	333 Hz, 0 VU Test Tape	PLAY	VR1, 20 kB	-5.5 ±0.5 dBm (410 mV)	
2	VU Meter Sensitivity Adjustment	333 Hz, 0 VU Test Tape	PLAY	VR2, 10 kB	0 VU indication	
3	Recording Level Adjustment	Low Noise Blank Tape, 1,000 Hz, 0 VU recording	REC/ PLAY	VR3, 10 kB	-5.5 ±0.5 dBm (410 mV)	Refer to Note 6)
4	Frequency Response Adjustment	Low Noise Blank Tape, 1,000 Hz, 10,000Hz,-20VU recording	REC/ PLAY	VR4, 200 kB	1,000 Hz to 10,000 Hz flat response	Refer to Note 6)

Chart-1

NOTES: 1) Set Tape Selector to Low Noise.

2) Set Dolby N.R. Switch to OFF.

3) Set Limiter Switch to OFF.

4) After Recording Level and Frequency Response Adjustments have been made with Low Noise Tape, comfirm with Chrome and Ferri-Chrome tape only.

5) Because each of these adjustments are vital to perfect Dolby N.R. circuit operation, be sure that they are carried out with as little error as possible.

6) Use the following cassette measuring tape:

Low Noise Tape: Fuji C-60LN

Chrome Tape: BASF # SM Chrome C-60

Fe-Cr Tape: SONY DUAD C-60

5. DC Resistance of Various Coils

Part	Designation	DC Resistance
Recording/Playback Head	HN-424822	160 ohms
Erase Head	WY-241Z	5.5 ohms
Solenoid	P-14W	5.0 ohms

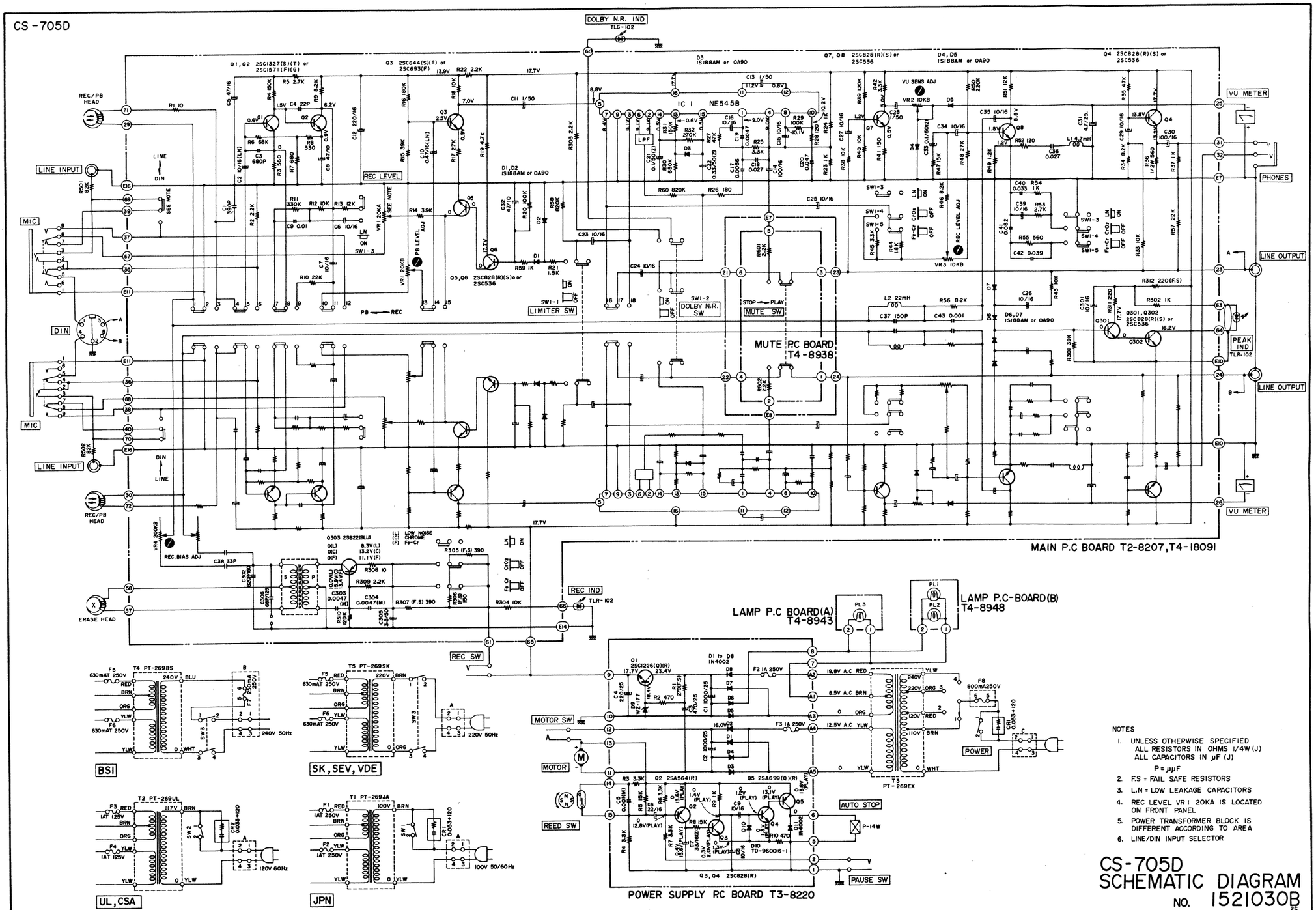
Chart-2

6. Basic Parts List

Parts Nomenclature	Parts No.	Note
Front Panel Block Comp. TA2-1390	BD700007	
Lid Panel Block Comp. TA3-1534	BD700288	
Cassette Holder Base Block Comp. TA2-1389	BZ700290	
Key Board Block Comp. TA2-1388	BK700301	
Rec/PB Head HN-424822 T4-8354	HP700413	
Erase Head WY-241Z T4-7514	HE700468	
Pinch Roller Arm Block Comp. TA4-10335	BL700942	
Supply/Take-up Reel Table Block Comp.TA4-7102	BR700986	
Flywheel with Shaft. TA4-12528	BF701100	
Capstan Belt. 62.25x5x0.4 T4-11840	MB701111	
Wind Belt 1x56.7 T4-11841	MB701122	
Tension Arm Block Comp. TA4-7062	BL701302	
Motor Block Comp. MHI-5R2CHA T4-8918	BM701335	
Idler Lever Assy Comp. TA4-12549	BL701357	
Counter T4-13188	MC701368	
Counter Belt A T4-13166	MB701370	
Counter Belt B T4-13167	MB701381	
Leaf Switch H-7157 T4-12059	ES701447	
Power Switch SDG-1P T4-8978	ES701458	UNI-TRA, JPN Model
Power Switch CSA. T4-8981	ES701987	CSA Model
Power Switch U/L T4-8979	ES702270	U/L Model
Power Switch SD-G-5P T4-8980	ES702371	SEMKO Model
VU Meter T4-8961	EM702382	
VU Meter T4-18146 (Yellow)	EM702393	JPN Model
Main P.C Board Block Comp. TD-269 TA2-8204	BA702404	
Volume 20 kA T4-8959	EV702415	
Din-Pin Block with P.C Board TD-269.TA4-8929	BJ702426	
Cabinet T2-1370	BC702775	
Pilot Lamp. 12V 50 mA T4-8946	EL703697	
Power Trans. PT-269JA T4-8968	BT703708	JPN Model
Power Trans. PT-269EX T4-8969	BT703978	UNI-TRA Model
Power Trans. PT-269UL T4-8970	BT706487	UL/CSA Model
Power Trans. PT-269BS T4-8971	BT706937	BEAB Model
Power Trans. PT-269SK T4-8972	BT707040	CEE Model

Parts Nomenclature		Parts No.	Note
LED P.C Board Block Comp. TD-269	TA4-8951	BT707141	
Single Knob. (TE-6010) T4-13194		SK640901	
Power Supply P.C Board Assy Comp.	TA3-8219	BA707758	UNI-TRA, JPN Model
Power Supply P.C Board Assy Comp.	TA3-8259	BA707837	CEE, BEAB Model
Power Supply P.C Board Assy Comp.	TA3-8258	BA707995	CSA, UL Model

CS-705D



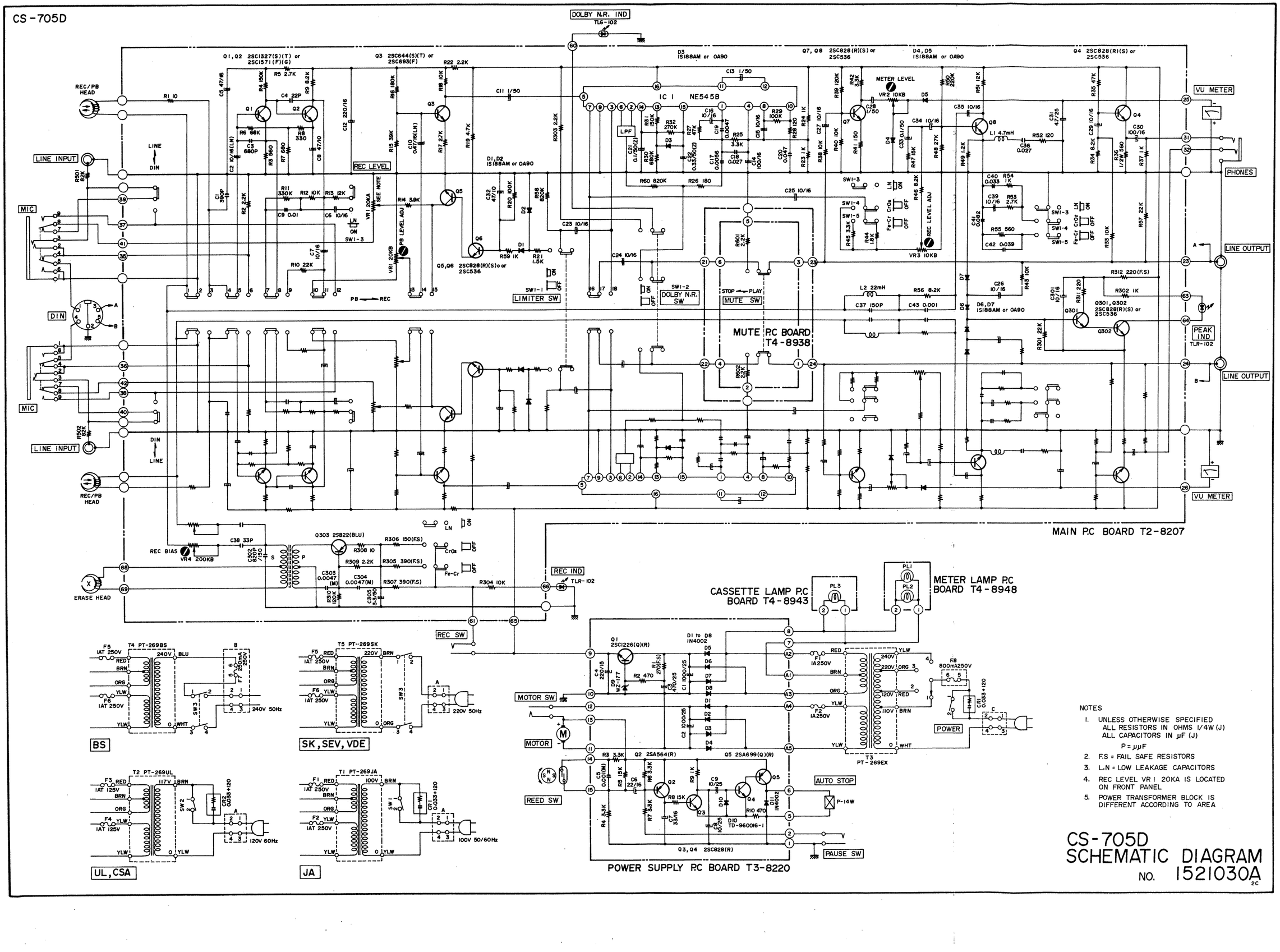
NOTES

1. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS IN OHMS 1/4W (J)
   ALL CAPACITORS IN μF (J)
   P = μμF
2. F.S = FAIL SAFE RESISTORS
3. L.N = LOW LEAKAGE CAPACITORS
4. REC LEVEL VR 1 20KA IS LOCATED ON FRONT PANEL
5. POWER TRANSFORMER BLOCK IS DIFFERENT ACCORDING TO AREA
6. LINE/DIN INPUT SELECTOR

CS-705D SCHEMATIC DIAGRAM

NO. 1521030B 2C

CS-705D



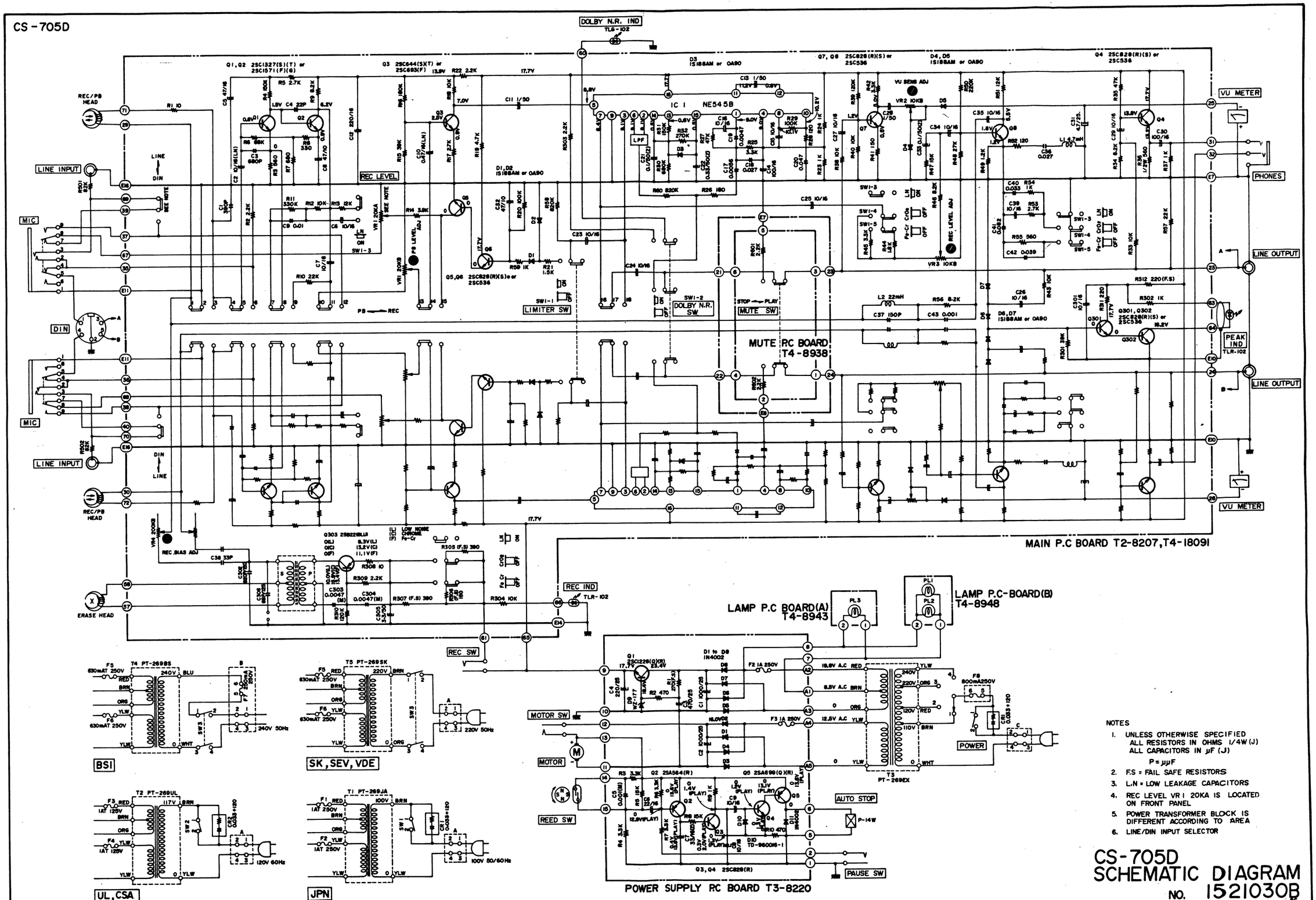
NOTES

1. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS IN OHMS 1/4W (J)
   ALL CAPACITORS IN μF (J)
   P = μμF
2. F.S = FAIL SAFE RESISTORS
3. L.N = LOW LEAKAGE CAPACITORS
4. REC LEVEL VR1 20KA IS LOCATED ON FRONT PANEL
5. POWER TRANSFORMER BLOCK IS DIFFERENT ACCORDING TO AREA

CS-705D SCHEMATIC DIAGRAM

NO. 1521030A 2C

CS-705D



NOTES

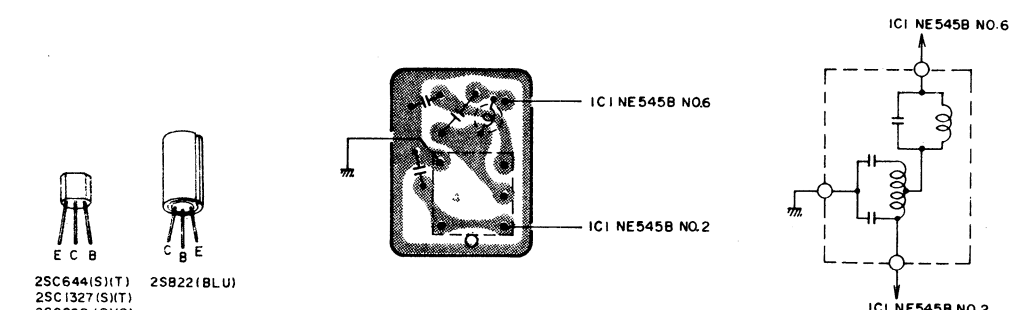
1. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS IN OHMS 1/4W (J)
   ALL CAPACITORS IN μF (J)
   P = μμF
2. F.S = FAIL SAFE RESISTORS
3. L.N = LOW LEAKAGE CAPACITORS
4. REC LEVEL VR1 20KA IS LOCATED ON FRONT PANEL
5. POWER TRANSFORMER BLOCK IS DIFFERENT ACCORDING TO AREA
6. LINE/DIN INPUT SELECTOR

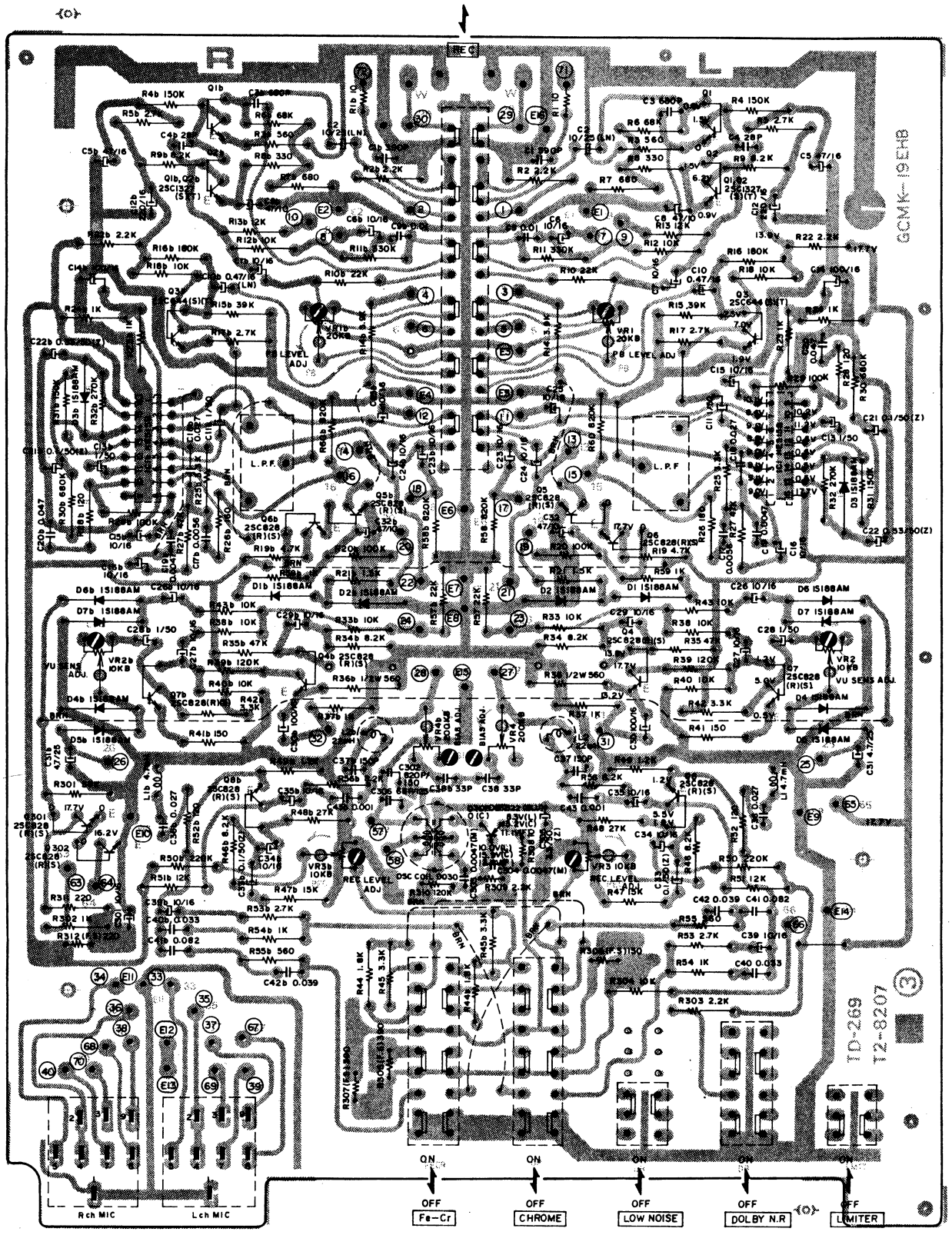
CS-705D SCHEMATIC DIAGRAM

NO. 1521030B

COMPOSITION OF VARIOUS P.C BOARDS

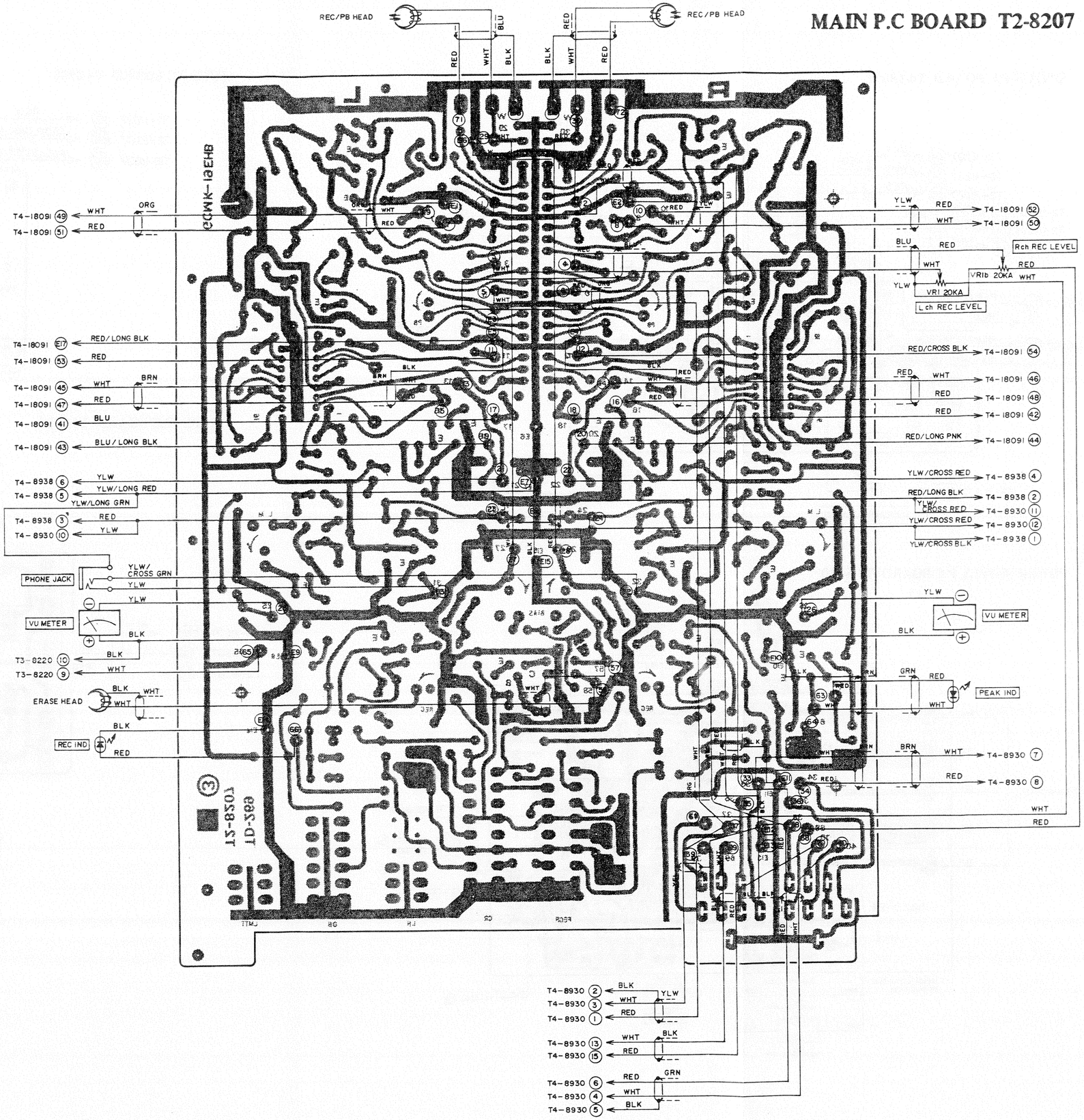
MAIN P.C BOARD T2-8207



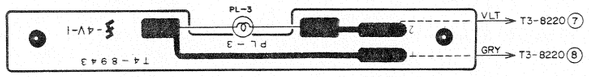


NOTE
(L) LOW NOISE
(C) CHROME
(F) Fe-Cr

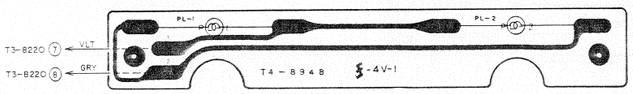
MAIN P.C BOARD T2-8207



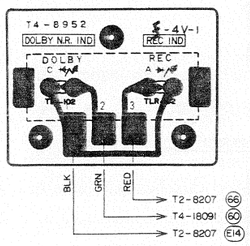
LAMP P.C BOARD (A) T4-8943



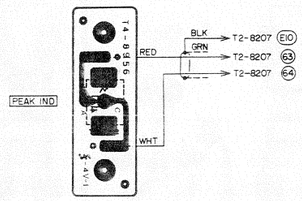
LAMP P.C BOARD (B) T4-8948



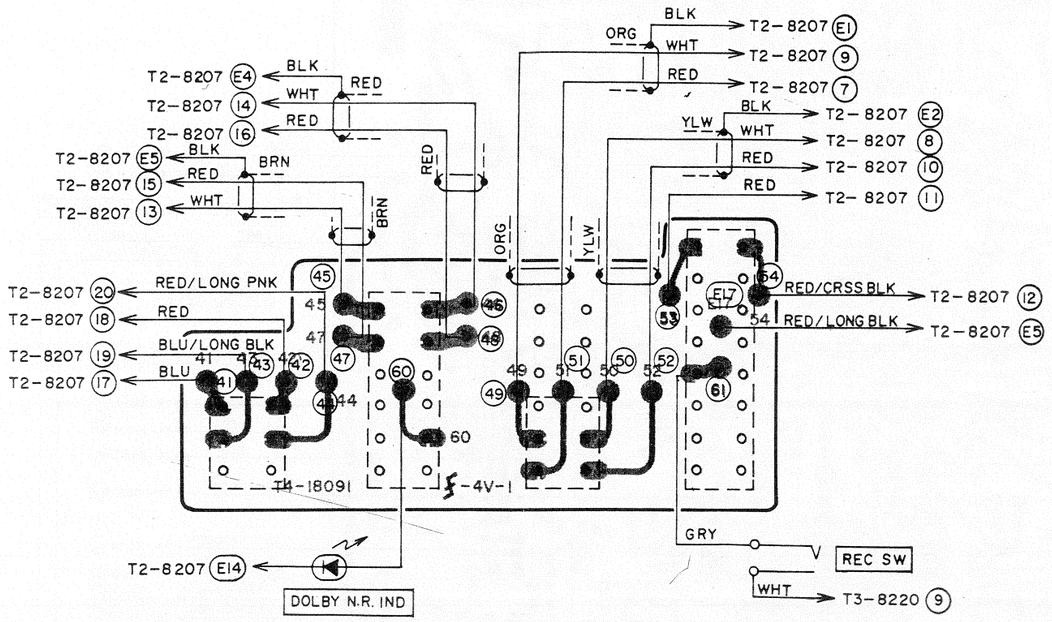
LED P.C BOARD T4-8952



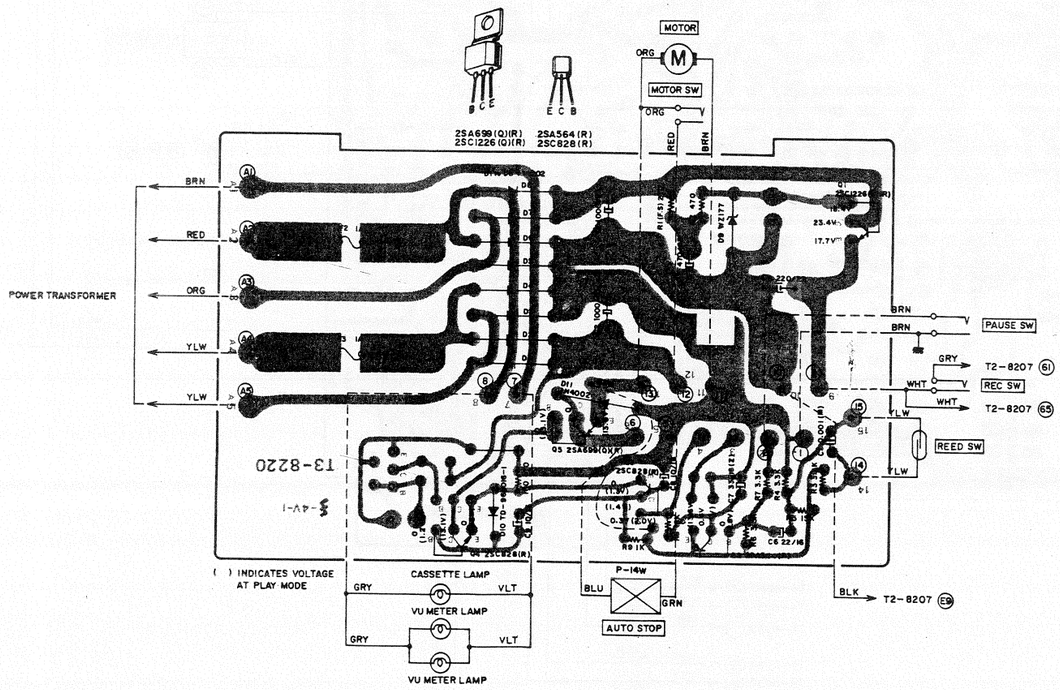
PEAK P.C BOARD T4-8956



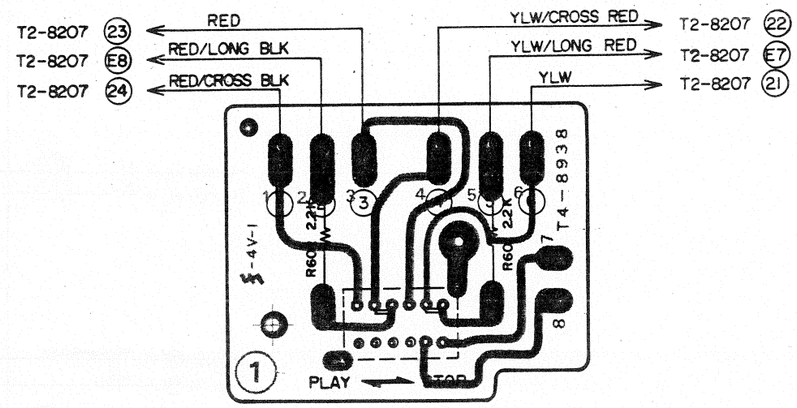
SWITCH P.C BOARD T4-18091



POWER SUPPLY P.C BOARD T3-8220



MUTE P.C BOARD T4-8938



DIN PIN P.C BOARD T4-8930